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OFFICE OF POPULATION CENSUSES AND SURVEYS
SOCIAL SURVEY DIVISION

Families five years on

A survey carried out on behalf of Population Statistics Division 1 of the Office of Population Censuses and Surveys

Myra Woolf
Sue Pegden

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Families five years on

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Myra Woolf
Sue Pegden

University of London's Goldsmiths' College

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Notes to tables

1. Throughout the tables in the report * indicates below 0·5 per cent.
2. Figures in brackets indicate that the derived statistics are based on fewer than 50 units.
3. References to statistical significance are made assuming:
   - (i) that the standard errors of estimates are approximately one and a half times those derived from simple random samples;
   - (ii) that two tailed tests are used;
   - (iii) a maximum probability of Type I error (level of significance) or 0·05, unless otherwise stated.
4. Percentage distributions are rounded independently; constituent parts may not add to 100 per cent.

Preface

In 1967 at the time of the first OPCS survey of family intentions[1], annual births (and birth rates) had been declining steadily from a peak which had been reached in 1964 after a period of almost 10 years when annual births had increased by some 3 per cent per annum. The report on the 1967 survey raised the question of the underlying significance of the observed changes in annual births (and birth rates), since such movements could result from changes in birth spacing patterns (i.e. the length of intervals between marriage and subsequent births) or could be indicative of changes in completed family size. Indeed one of the objectives of the 1967 survey was to unravel, as far as possible, the very many factors, of a demographic, social and economic nature, which had some bearing on the movements in annual births (and birth rates), and then to make some estimate of what this, together with information on fertility aspirations, may presage for the future.

Subsequently, between 1967 and 1972, annual births (and birth rates) declined further but rather more steeply, and in 1972 it was decided to mount a follow-up survey as an extension of that undertaken in 1967. Annual births (and birth rates) have shown additional steep drops between 1972 and 1974. This continued fall since 1967 has raised even further questions such as whether the long-term fertility prospects are for a level above or below replacement as assessed by current performance and future expectations, and whether or not family sizes might stabilise in the future.

Number of live births, crude birth rate and general fertility rate, England and Wales

Year	*Number of live births (thousands)*	*Number of live births per 1,000 population of all ages (crude birth rate)*	*Number of live births per 1,000 women aged 15–44 (general fertility rate)*
1954	674	15·2	72·9
1964	876	18·2	93·0
1967	832	17·3	89·1
1972	725	14·8	77·5
1974	640	13·0	67·5

A wealth of information is obtained from the birth and marriage registration statistics which indicate the underlying demographic reasons for the observed movements in annual births (and birth rates) e.g. the extent to which such movements are due to changes in the number of women of reproductive age, or changes in family formation patterns between women of different ages, married at different times and with different numbers of liveborn children. In a low fertility society with an average number of children per woman around 2·1 (replacement level) a relatively small change in family size distributions, i.e. the proportion of women having particular numbers of children, can lead to a change in the average family size of only 0·1, but this represents a 5 per cent decrease/increase in fertility. Family formation surveys are therefore concerned with the exploration of the behavioural and motivational factors lying behind the movements in fertility and whether or not these may lead to lower (or even higher) completed family sizes, as well as providing valuable comparative information on such topics as the role of contraception in regulating fertility behaviour, both for those married at different times and for those with different social/economic backgrounds.

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[1] Myra Woolf *Family Intentions* HMSO 1971.

The broader but more comprehensive statistics derived from the birth and marriage registration systems therefore provide a valuable background against which the 1967 survey and the follow-up survey results can be viewed and contrasted; both in terms of showing general trends in fertility and in terms of detailed information on recent levels and patterns in fertility for particular groups of women.

Recent trends

The historical picture on marriage has been one of more marriages, and at younger ages. For example about 86 per cent of women born in 1900 ever married, with less than half marrying by age 25; in contrast about 95 per cent of women born in 1940 will ever marry, of whom 85 per cent were married by age 25. It is interesting to note that whilst the length of time of exposure to motherhood within marriage has increased over past decades, average completed family size has decreased. More specifically, the sharp falls in births in recent years have taken place without any sharp changes in the number of marriages or marriage rates.

Fertility may be split into two components: the average completed family size of any given group of women born or married in particular years, and the timing of the births (i.e. the age-specific pattern of fertility) within that group's completed fertility. Fertility in a given calendar year (i.e. the 'period' rate) is the sum of the fertility in that year of the different groups of women born or married in particular years who are currently of childbearing age.

It is evident that there have been 'period' influences (e.g. economic conditions) at work which have affected, although to differing degrees, the childbearing experiences of all women in particular years. This is shown in the following tables which give numbers of live births/specific rates for different characteristics of the mother, for the years 1967 and 1972.

Number of legitimate live births to women married once only, by number of previous liveborn children, England and Wales

(*Thousands*)

Year	*Number of previous liveborn children*						
	All	*0*	*1*	*2*	*3*	*4*	*5 and over*
1967	745·2	282·6	238·0	119·8	53·8	25·2	25·8
1972	642·3	262·2	223·9	93·6	36·3	14·2	12·2

Number of legitimate live births to women married once only, by duration of marriage, England and Wales

(*Thousands*)

Year	*Marriage duration (completed years)*							
	All	*0*	*1*	*2*	*3*	*4*	*5–9*	*10 and over*
1967	745·2	115·1	92·4	87·0	81·1	67·3	196·5	105·9
1972	642·3	87·5	76·8	85·6	83·4	70·7	170·1	68·2

Number of live births per 1,000 female population by age of mother at birth, England and Wales

Year	*Age of mother at birth*						
	15–44	*15–19*	*20–24*	*25–29*	*30–34*	*35–39*	*40–44*
1967	89·1	49·1	167·0	167·4	93·1	43·2	12·1
1972	77·5	48·1	141·8	142·8	70·0	28·9	7·1

Over the past two or three decades the period fertility rate has shown a considerable amount of variation which has not been reflected to the same extent, however, in the average completed family sizes of different groups of women born or married in particular years i.e. these period movements could reflect a change in the timing of births rather than in the totality of births born to particular groups of women.

To some extent, it is possible to throw light on whether or not such period movements are a reflection of timing changes, rather than fundamental changes in average completed family size, by examining the fertility behaviour of groups of women born or married in particular years. For example, such an analysis shows that women married in the late 1950s and early 1960s tended to have their children earlier in marriage, thus contributing to an increase in annual births during that time; but having completed their families relatively quickly they are tending to have lower fertility in the later years of marriage, thus contributing to the fall in annual births in the mid and late 1960s. The early childbearing experience of women married in the late 1950s and early 1960s, as typified by the 1956 and 1961 marriages, is illustrated in the following table. The table also shows a decline in fertility in the early years of marriage for those recently married (as typified by the 1966 and 1971 marriages), and a decline in the proportion of women moving on to higher order births. For example, 65 per cent of women marrying for the first time at ages 20 to 24 in 1971 were still childless after two years of marriage whilst the corresponding figures for women marrying in 1966 and 1961 were 52 per cent and 48 per cent respectively; and of women marrying at ages 20 to 24 in 1961, by 1971 (after 10 years' marriage duration) 28 per cent of those who had had four children had within that period gone on to have at least one more child, whereas the corresponding figure for women marrying in 1951 had been 36 per cent. (It should be noted, however, that post–1967 marriages were not included in the follow-up survey.) Evidence from past interview surveys has shown no suggestion of any substantial increase in the proportion of women wishing to remain childless (implying that much of the recent decline in fertility in the early years of marriage is a deferment of starting a family), and a decline in the proportion of women wishing to have large families (which is consistent with the trend illustrated above).

Family size distribution (per 1,000 women) after 2, 5 and 10 years of marriage, for women marrying for the first time at ages 20 to 24, England and Wales

Numbers of liveborn children	*Duration of marriage (exact years)*											
	2					*5*				*10*		
	Year of marriage											
	1951	*1956*	*1961*	*1966*	*1971*	*1951*	*1956*	*1961*	*1966*	*1951*	*1956*	*1961*
0	518	500	477	520	651	258	226	185	207	138	111	85
1	440	450	459	420	306	420	385	352	363	271	217	177
2	40	48	59	55	39	253	301	362	359	353	376	435
3	2	2	4	4	4	57	73	85	60	155	189	215
4	0	0	1	1	0	10	13	13	9	53	71	63
5 or more	0	0	0	0	0	2	2	3	2	30	36	25

An analysis of completed family sizes at specific durations of marriage shows that in the past women with relatively high fertility in the early years of marriage were more likely to have larger average completed family sizes than those with low fertility; however, the group of women marrying in 1961, although having high fertility in the early years of marriage, were showing signs by the 10th year of marriage that their average completed family size would not necessarily be any higher than that for women married prior to 1961 with a slower build up. This is illustrated in the following table.

Average family sizes after selected durations of marriage, for women marrying for the first time at ages 20 to 24, England and Wales

Year of marriage	*Duration of marriage (exact years)*				
	2	*5*	*10*	*15*	*20*
1951	0·55	1·16	1·89	2·19	2·28
1956	0·57	1·28	2·03	2·29	
1961	0·61	1·42	2·10		
1966	0·56	1·33			
1971	0·41				

Although in the past there appears to have been some relationship between birth spacing patterns and completed fertility, the spread of more efficient methods of contraception may mean that this need not hold in the future, since in a low fertility society it would be possible for women to have, say, two children in a relatively short space of time whether this be in the early or later stages of marriage. Period forces may now play a more important role in the timing of births because of the increased power that regulation of fertility gives couples to respond to such forces.

Conclusion

This short description of recent trends in marriage and fertility has attempted to provide a suitable background against which the 1967 survey and the 1972 follow-up survey results need to be viewed and contrasted; particularly given that the 1967 survey was taken at a point in time when annual births had been declining for about three years and that this decline continued to the follow-up survey in 1972. (The decline continued in 1973 and 1974 although these years were of course not covered by the follow-up survey.) Although it has been possible to indicate some of the underlying demographic reasons for changes in annual births, both the 1967 survey and the follow-up survey in 1972 enable these analyses to be set in a social/economic/motivational framework.

Population Statistics Division I.
Office of Population Censuses and Surveys.

1 Introduction

This introduction sets out the main methodological points that need to be borne in mind in assessing the findings in the report.

1.1 Background to the study

The present study is essentially a follow-up to the 1967 study[1] which initiated an investigation into the appropriateness of questioning women about the number of children they expect to have and when they expected to have them, in order to anticipate trends in fertility. The 1967 study had also some lesser objectives such as providing a current description of fertility difficulties and contraceptive usage. It also attempted a systematic study of women's attitudes in relation to family size.

The data in 1967 were obtained by means of a questionnaire drawn up after detailed interviews with some 70 women and a pilot study which consisted of interviews with a further 200 women. The fieldwork for the main investigation took place between July and December 1967. The information was sought from a probability sample of 6,306 women in England and Wales who described themselves as being married, once only, and who were aged below 45 years at the time of the fieldwork.

However, the method of selecting the sample seemed to result in a sample that omitted a disproportionate number of women aged under 20 and of 40–44 years of age. The effects of this omission on the findings of the 1967 study are considered in greater detail in the Introduction and Appendix A of the published report.

In brief, the survey data in 1967 indicated that women marrying after 1959 expected to have smaller families, on average, than those who married in the 1950s and the accompanying data on the use and intended use of methods of conception control supported this expectation. There was also evidence to suggest that the rate at which birth intervals had previously been declining would slow down and that there was the possibility of a stabilisation or even an increase in the length of the interval between first and second births.

The conclusions were based on the results of a single cross-sectional study which relied on retrospective questioning about events in the past and on statements about expectations and intentions. The inferences about changes in fertility were drawn mainly from analyses of the fertility behaviour of the different marriage cohorts. It is impossible with such a research design to disentangle the sequence of events which culminate in a final number of children born at specific times i.e. whether thinking three children ideal leads to a family of three children or whether having three children results in statements claiming that three children are ideal or whether the association, if any, is spurious and cannot be discovered from such a research design. Some kind of follow-up study, and preferably a series of such studies, is essential to trace the sequence of events more carefully as well as to provide more valid and reliable data at shorter intervals of time.

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[1] Myra Woolf *Family Intentions* HMSO 1971.

1.2 The objectives of the 1972 study

The 1972 follow-up investigation set out:

a. to assess the value of the women's statements in 1967 about the number of children they expected to have as surrogate measures for final family size; and

b. to investigate the fertility behaviour and intentions since the 1967 investigation.

In practice, the objectives were somewhat more limited than the general statements above indicate because of restrictions imposed upon the research design. Limited resources dictate that:

a. only a sub-sample of those previously investigated could be included in the recall;
and

b. no provision could be made for including women married between 1967 and 1972.

The latter proved to be a severe limitation on the interpretation of data relating to birth intervals.

It should perhaps be pointed out also, that when the initial study was carried out there was no guarantee that resources would be available for a follow-up study. This resulted in less than adequate provisions for the maintenance of contact with women included in the initial investigation and a response which was lower than it ought to have been and biased against those women who were childless in 1967.

Thus, in effect, the objectives of the 1972 investigation were broad in intention but in practice were confined to women who were married between 1960 and 1967.

1.3 The methods of the recall study

To allow for the possibility of analysis by both marriage and birth cohort the women to be included in the recall sample were defined as:

Sample A: those aged under 30 at the time of the 1967 investigation
and
Sample B: those married between 1960 and the 1967 interview.

There were, in 1967, 2,357 women eligible to be included in sample A and 2,270 eligible for sample B; approximately 2,000 were eligible for both samples. Women who said in 1967 that it was impossible for them to have any more children were excluded from the recall sample altogether. They constituted about 1 per cent of the eligible women.

For reasons which are considered in Appendix B, the women who were successfully interviewed in 1972 numbered 1,470 of sample A and 1,384 of sample B. Proportionately, the responding samples contained marginally fewer women who were married in 1965–67 compared with the samples set (16 per cent of sample B interviewed compared with 19 per cent of sample set), fewer women childless in 1967 (29 per cent compared with 32 per cent) and fewer who expected to remain childless (6 per cent compared with 8 per cent). The effect this has on the findings from this study is also assessed in Appendix B.

After a pilot study based on re-interviews with women married between 1955 and 1959, a final questionnaire was drawn up. It covered the same major subject areas as the 1967 study namely pregnancy history since marriage, ideal and expected numbers of children, such information as the woman possessed about her (or her husband's) fecundity, conception control practices and data on the social, economic and psychological situation of the woman and her husband which appear to be related to family building. In two particular areas the questions were more extensive than in 1967. The first concerned the circumstances in which living children were conceived and the woman's views about the intervals between births which resulted from each conception between the two interviews in 1967 and in 1972. The second was also concerned with the period between the two interviews and attempted to obtain a detailed history of contraceptive use for the period.

In assessing the stability or otherwise of the number of children women expected to have or thought ideal, the women themselves were not asked directly to explain the reasons for their consistency or change. The reasons for this are given in the introduction to Chapter 2. Instead the 'explanations' were inferred from the cross-analyses of stability or change by data illustrating the family, social, economic and psychological situation of the couple or the wife, herself, though the data considered relevant were obtained from the study of the pilot interviews with the women. This inevitably presents only part of the picture.

For the present study, the analyses mainly took the form of:

a. comparisons of data for 1967 and 1972

b. comparisons of the 1972 data for women married between 1960 and 1967 with the 1967 data for women married between 1955 and 1962 i.e. comparing women with the same marriage durations at an interval of five years to investigate changes independent of marriage duration

and

c. comparisons of the 1972 data for women aged between 21 and 34 years in 1972 with the 1967 data for women of similar ages in 1967, to investigate changes which were independent of age.

In addition, more detailed analyses of the 1972 data are presented in order to describe the 1972 situation for women married between 1960 and 1967. On the whole the analyses relating to sample A, based on the ages of the women i.e. birth cohorts, have not been pursued in detail. Partly this is because the general conclusions appear to follow those of the sample of marriage cohorts where data for both have been analysed but more importantly, because the analyses by birth cohorts suffer from the major limitation that for any particular cohort the group included in the survey consists only of those who happen to have been married at the time of the (initial) interview. Thus any analyses of women aged 20–21, say, in 1967 are confined to those women who at that time happened to be married. Since fertility behaviour is related to the ages at which women marry, analyses based on early marriages present problems in interpretation. Fewer such problems attend the analyses of data of marriage cohorts where survey data based on married women are concerned.

It is perhaps worth making explicit some assumptions that have been made in drawing up this research study. The first is that information on fertility behaviour is more validly obtained from wives than from husbands. This is perhaps questionable. The second is that marriage is the starting point for the processes involved in family building and that data prior to marriage which may affect the process can be obtained by retrospective questioning. The results of the present study suggest that the strategy of family building, if it exists, is only loosely defined at marriage and it is possible that the assumption that the process starts there is too restrictive.

1.4 The organisation of the report

This report consists of four chapters apart from this brief introduction:

Chapter 2 is concerned with a discussion of ideal and actual family size

Chapter 3 evaluates the stability or otherwise of 'expected numbers of children'

Chapter 4 discusses the spacing of births and the changes which have occurred since 1967

Chapter 5 describes the incidence of involuntary infecundity and the voluntary control of conception.

A major omission has been the assessment of women's attitudes towards motherhood and children in relation to family building. In 1967 the data suggested a direct relationship between family size and a limited number of attitudes reflecting women's concerns with motherhood, partiality to children, concern with over-population and over-crowding and the perceived material requirements of children and family size. In 1972, these attitude constructs remained stable though, to date, it has not yet been possible to assess whether the same women hold the same attitudes or whether women in the same circumstances at five year intervals hold the same attitudes. It is hoped that these analyses will appear separately.

2 Family size

2.1 **Introduction**

This chapter is primarily concerned with the number of children actually born and the number thought ideal by women married between 1960 and 1967 and by their husbands.

In 1967, after less than eight years of marriage these couples had had an average of 1·2 children: almost a third were still childless, a further third had one child, a quarter had two children and the remaining 9 per cent had three or more children. This average compared with a mean of 2·1 children (in 1967) for women married between 1955 and 1959 and 2·4 children for those married between 1950 and 1954. At that time, women married between 1960 and 1967 thought that an average of 2·4 children was ideal for couples like themselves—almost two-thirds thought that a two-child family was ideal—while 3·3 children, on average, were said to be ideal if the couples had 'no particular worries about money or anything like that'. Answers to the question on the number thought ideal for couples 'with no particular worries . . .' ranged in almost equal proportions over two, three or four children.[1]

The evidence at that time suggested that women married in the 1960s had lower ideals than those married in the 1950s and that this was brought about by a marked reduction in the proportion of women who thought that four children constituted an ideal family. The implication seemed to be that the number of children thought ideal was declining among those more recently married.

One problem in drawing such an inference from the data was the varying marriage experiences of the different marriage cohorts. Merely by virtue of being married longer, women may have increased the number of children they thought ideal—perhaps because they themselves had had more children than they had initially considered ideal—and the decrease in ideal family size over the marriage cohorts may have been more a function of the length of the marriages than a symptom of changing norms.

A major objective of the present study was to assess the extent of any real changes which were independent of the duration of marriage (and in some cases, independent of the ages of the women). In this chapter, the particular interest lies in differences in the number of children thought ideal by women married for the same length of time in 1967 and in 1972 and in differences in the numbers actually born. A description of the different numbers of living children couples had by 1972 is also included, given in terms of their socio-economic characteristics, their assessment of their own future fecundity both in 1967 and in 1972 and in terms of their use of contraception in 1972.

The data on actual and ideal numbers of children were also combined to provide a measure of the number of living children in excess of the stated ideals and hence the number of children who could be said to be 'unwanted' at the time of the investigation though some may not necessarily have been so at the time they were born. An additional measure, this time of children unwanted at birth, is discussed in relation to the number of living children born to this group of women between 1967 and 1972. Conversely, the incidence of wasted pregnancies—unrealised births in some cases—is briefly reviewed. However, the number of pregnancies which did not end in a live birth for this group of women, was not sufficiently large to provide a definitive description of the situation. The conclusions to be drawn from the data were further limited by the bias in the recall sample which under-estimated the number of women who were childless in 1967: a disproportionate number of these women were likely to be childless in 1972, perhaps because of wasted pregnancies.

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[1] Myra Woolf op. cit.

Finally, this chapter ends with a consideration of the numbers of children that women said their husbands wanted and, again, of the changes in these opinions between 1967 and 1972.

At this point it is necessary to mention briefly some of the qualifications which need to be borne in mind in assessing the data. These are discussed in greater detail in the first chapter. Apart from the under-representation of childless women in the recall sample, women who in 1967 claimed that they were definitely sterile, mainly because of the sterilising operation, were excluded from the follow-up study altogether. This amounted to some 4 per cent of all respondents in 1967 and some 1 per cent of those married between 1960 and 1967. Limited resources also prevented the inclusion of marriages which took place between 1967 and 1972 and, therefore, children born in these marriages were excluded. Nothing can be said about the actual number of children or changing norms which have occurred in marriages which took place after 1967.

The answers of the women to three questions together with a pregnancy history form the basis of the discussion in the chapter:

a.i Thinking about couples more or less like yourselves, what do you think is the ideal number of children for them to have nowadays?

a.ii And what do you think is the ideal number of children for a couple in this country, nowadays, supposing they had no particular worries about money or anything like that?

b. TO THOSE WITH MORE THAN ONE LIVING CHILD
When you had (NAME OF CHILD) did you feel you had *more* children than you really wanted?

c. TO THOSE WITH ONE OR MORE LIVING CHILDREN
How many children do you think your husband wants now (counting those you already have)?

d. Details of the woman's pregnancy history since marriage, taken in 1972 and giving information on the outcome of each pregnancy and whether each liveborn child was still living.

Inevitably, much of the analysis is numerical and tends to be carried out in terms of differences between means—for brevity—and between percentage distributions. The latter should indicate the manner in which some of the differences between means have been brought about and where, given the similarity of some means, these conceal differing distributions. Where answers have been ambiguous numerically, for example where answers have been given in the form 'at least two', 'not more than four', 'between two and four', the answers have been treated differently in some distributions and in the computation of means. In certain tables, all these kinds of answers have been included in the category labelled 'Ranges' (e.g. in table 2.2 these answers constitute 3 per cent of all replies to the question a.i above). In other tables and in the computation of the arithmetic means, numerical values have been assigned to these answers. Where the answers were in the form 'not more than . . .', 'at least . . .' a value 0·5 below or above the named value, respectively, was given. Where a range was given, the arithmetic mean was taken as the value to be assigned. In some tables (e.g. table 2.6), the category 'Ranges' has been omitted and the assigned values have been included in the appropriate whole number category. Thus the answer 'At least two children' would have been included in the category labelled 'Ranges' in the table 2.2, in the category '2' in table 2.6 and would have been given the value 2·5 in the computation of the arithmetic means. However, these arbitrary decisions affected only a very small minority of responses (not more than 4 per cent) and were unlikely to vitiate the general conclusions.

2.2 **Ideal family size**

It is important to include a consideration of the number of children considered ideal not because it necessarily provides a measure of the size of family an individual woman aims at or ultimately has, but rather because views on the 'ideal' indicate what might be acceptable or appropriate for a community at a particular point in time. Around this norm, the desired, expected or actual family sizes for individual couples will fluctuate.

The evidence about the nature of the association between the number of children thought ideal and actual (or final) family size is equivocal. Partly this is due to a continuing confusion in the literature between correlation and equivalence. While 'it has been found that ideal family size rises more or less steeply with increasing actual family size',[1] the actual proportion of women giving the same responses to ideal and current or to ideal and intended family size was low.[2] The reasons for the lack of equivalence are not difficult to understand. Women who hold the view that a family of two or three children was ideal might find themselves infecund and unable to consider their ideal family size as a possible target, women who think small families ideal may hold this view without any strong personal commitment to it, and therefore go about planning their families in a way which was not compatible with their achieving a small family. Furthermore, it is likely that views about ideal family size change for individual women not only as a response to external events in the long term—its raison d'être as a measure of group norms—but also in relation to the length of time a couple have been married so that the measure is unlikely to be stable enough to function as a once-and-for-all target at which to aim. Over and above these actual changes in views, there is also a considerable element of measurement unreliability in the estimation of ideal family size.[2] Moreover, discussions with women during the pilot stage of this investigation led to a belief that the stated ideal family size, even for couples 'like yourselves', was often seen as ideal for other people and not necessarily for the individual woman herself.

Inasmuch as there is an equivalence (or even an association) between ideal and actual (or completed) family size, it has been argued[3] that the stated ideal is what has actually happened. It is not that views about ideal family size influence behaviour but rather that having a specific number of children influences statements about ideals. The evidence from the current study does not entirely support this latter opinion, particularly for women married for a relatively short duration. For example, childless women showed a distribution of views about the number of children they considered ideal for couples 'like yourselves' not grossly dissimilar from those with two children. However, those with three or four children did have higher ideals than those with two children (table 2.8).

Further anomalies arise because the details implicit in the concept of ideal family size are rarely spelt out to the women being interviewed. For some women 'ideal' is seen as ideal for themselves, as mothers, at that moment of time. Others view a particular number of children as ideal for its effect on the children themselves, either in material terms or in its socialising effect. This became apparent in the detailed examination of the attitudes of the women to the values they associated with motherhood. In some cases, 'ideal' is what is ideal for society, crystallised in views about overcrowding and over-population. Again, the point in time to which the 'ideal' refers is left ambiguous—whether current or some time in the future.

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[1] Helen Ware *Ideal Family Size* World Fertility Survey Occasional Papers 13.
[2] N Ryder and C F Westoff *Reproduction in the United States 1965* Princetown University Press 1971.
[3] P Hauser *Family Planning and Population Programs* a book review article as quoted in H Ware op. cit.

Therefore, it is not surprising that there is little equivalence between ideal and actual family size. Nevertheless, an association is frequently found and the real importance of the concept of ideal family size would seem to be the relationship it bears to prevailing community standards about acceptable family size. Taking a wider, cross-national, view of fertility, it would seem that such norms are likely to be more influential in both affecting fertility and assessing the potential for change than the actions and preferences of individual women.

Norms concerning family size seem to develop relatively early in life. A study in the USA (1970)[1] has shown that more than three-quarters of a sample of school-children aged between six and 12 'had given thought to an ideal number of children for themselves' and the number of children considered ideal 'clustered in the two-to-four child range'. This is also the ideal family size range usually given by adult samples in American surveys. In another American study Rainwater (1965)[2] found that women who had fewer children than the two-to-four child range considered ideal by over 90 per cent of his sample were regarded as selfish or neurotic. Women who had larger families than those within the acceptable range were more likely to be characterised as lacking in discipline or having 'poor judgement'. A similar concentration on two, three or four children as the ideal was also expressed by women interviewed in 1967 for 'Family Intentions'.[3]

If the norms in a community were to increase or decrease markedly, a change in the distribution of ideal family size preferences, and possibly some effect on actual family size, would be expected. Therefore a decrease in the proportions of women who considered four or more children ideal, for example, might suggest the beginnings of a trend towards a two-to-three child range as the ideal and a subsequent decrease in family size. It is within the context of long-term trends in ideal family size that changes in the shorter-term expected family size might more fruitfully be assessed.

All women interviewed in the present study were asked about the number of children they considered ideal for couples 'more or less like yourselves' and couples 'with no particular worries about money or anything like that'. These were repetitions of questions asked in 1967.

It is important to distinguish between these two measures. The concept of ideal family size for couples 'more or less like yourselves' seems to bear the closest relation to actual family size and reflects the number of children which couples feel would be appropriate for couples in their situation, though not necessarily for themselves. It can be argued that the concept of ideal family size for couples 'with no particular worries . . . ' also plays some part in fertility behaviour since it might indicate an 'upper limit' on the size of family to which couples within a particular community might aspire if freed from financial and other constraints.

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[1] S O Gustavus and C I Nam *The formation and stability of ideal family size among young people Demography* 7 (1) 43–51 February 1970.

[2] L Rainwater *Family Design* 1965.

[3] Woolf op. cit.

Although it is important not to underestimate the relationship between socio-economic factors and family size, the evidence suggests that the latter measure of ideal family size (for couples 'with no particular worries . . .') bears less relation to actual behaviour. The opinions expressed by women in the pilot interviews lend weight to our view that this concept refers to some abstract ideal, which is seen as being appropriate for other people but is not conceived of as a real possibility or option for the informants themselves. That is, they themselves would never be in the position of not having financial worries.

Table 2.1 shows, as did the 1967 data, that the mean number of children considered ideal for couples 'with no particular worries' was higher than the mean number considered ideal for couples 'like yourselves'. Perhaps more important, it indicates that the number of children considered ideal in 1972, on both measures, decreased continuously for women married since 1960, and in the case of couples 'like yourselves' stabilised for marriages taking place in 1964 or later at an average of 2·1 children. This compares with a mean ideal for couples 'like yourselves' of 2·4 children for the same cohort, five years earlier.

Table 2.1 *Women married 1960–67*
Mean number of children considered ideal in 1972
(a) for couples 'with no particular worries about money . . .'
(b) for couples 'like yourselves' (analysed by date of marriage)

Date of marriage	*Number of women*	*Mean numbers of children considered ideal for*	
		(a) Couples 'with no particular worries about money . . .' in 1972	*(b) Couples 'like yourselves' in 1972*
All dates	1,384	2·9	2·2
1960–61	365	3·0	2·3
1962–63	387	2·9	2·2
1964–65	404	2·8	2·1
1966–67	228	2·7	2·1

Reference to the two following tables suggests that, for both measures, the decline in the mean number of children considered ideal is attributable to fewer women in the later cohorts opting for four or more children as an ideal number. For women married in 1960–61, almost equal proportions, in 1972, thought that either two or four (or more)[1] children would be ideal for couples 'with no particular worries . . .'. For women married later, in 1966–67, almost twice as many considered two ideal as four. Under the advantageous circumstances of 'no particular worries about money or anything like that', an odd number of children, three, is considered less favourably than an even number, two or four. When the couple's own circumstances are taken into account, a family of four is less likely to be considered ideal compared with a family of three. This concentration on an even number of children, two or four, as ideal reinforces the view that the concept of an ideal number of children particularly for couples 'with no particular worries . . .' bears more relation to the abstract notion of an 'ideal family' with its two or four children (with probably an equal number of each sex) than it does to any course of action which the couples might follow if financial constraints no longer applied. For couples 'like yourselves' an overwhelming majority of women in 1972 (78 per cent) thought that two children were ideal. This rose to 81 per cent for women married in 1964 or later and compares with 63 per cent to 66 per cent for the same women in 1967.

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[1] The proportion opting for more than four children was very small.

Table 2.2 *Women married 1960–67*

Percentage distribution and mean number of children considered ideal in 1972 for couples 'like yourselves' (analysed by date of marriage)

Number of children considered ideal in 1972 for couples 'like yourselves'	*Date of marriage*				
	All dates	*1960–61*	*1962–63*	*1964–65*	*1966–67*
	%	%	%	%	%
0	1	*	1	*	2
1	2	1	2	2	3
2	78	75	76	81	81
3	11	12	12	9	10
4 or more	5	8	5	3	2
Ranges	3	3	3	2	1
No answer	1	1	2	1	2
Mean number	2·2	2·3	2·2	2·1	2·1
Base	1,384	365	387	404	228

Table 2.3 *Women married 1960–67*

Percentage distribution and mean number of children considered ideal in 1972 for couples 'with no particular worries about money . . .' (analysed by date of marriage)

Number of children considered ideal in 1972 for couples 'with no particular worries about money'	*Date of marriage*				
	All dates	*1960–61*	*1962–63*	*1964–65*	*1966–67*
	%	%	%	%	%
0	*	—	*	*	*
1	1	1	1	1	1
2	44	37	44	47	50
3	18	15	18	20	17
4 or more	31	41	31	26	26
Ranges	4	4	4	4	3
No answer	2	2	3	2	3
Mean number	2·9	3·0	2·9	2·8	2·7
Base	1,384	365	387	404	228

With the passage of five years, women's views about the number of children that constitute an ideal family can be expected to change. In some cases, unplanned pregnancies which were later accepted may have led to a reappraisal resulting in an increase in the number of children considered ideal; in other cases, an additional five years' experience of child-bearing or a growing awareness of infecundity might have resulted in a reduction in the number of children considered ideal.

To discount the effects of the passage of time leading to either an increase or a decrease in women's views about the ideal number of children, an analysis was carried out comparing ideal family size for similar durations of marriage for women interviewed in 1967 and in 1972. These were not, in the main, the same women. The 1972 answers on ideal family size of the 1972 recall sample (women married 1960–67) were compared with the 1967 answers of women married between 1955 and 1962. Women married 1960–62 appear in both groups; their 1972 answers are included in the former group, their 1967 answers in the latter.

If changes in opinions about ideal family size were solely a function of the length of time women had been married, it would be expected that those married five to six years in 1967 would hold the same opinion as those married five to six years in 1972 and similarly for other durations of marriage. In fact, as tables 2.4 and 2.5 show, at all durations of marriage, the mean ideal numbers for both couples ‘like yourselves’ and couples ‘with no particular worries . . .’ were lower in 1972 than in 1967. This suggests that there has been a decline in the number of children that are considered to constitute an ideal family, and this decline was unrelated to the point in the marriage continuum at which the woman found herself.

Table 2.4 *Women married 1955–62*
Women married 1960–67

A comparison of the percentage distributions and mean numbers of children considered ideal in 1967 and 1972 for couples ‘like yourselves’ (analysed by duration of marriage in 1967 and 1972)

Number of children considered ideal for couples ‘like yourselves’	*Duration of marriage*									
	All durations		*11–12 years*		*9–10 years*		*7–8 years*		*5–6 years*	
	in 1967	*in 1972*	*in 1967*	*in 1972*	*in 1967*	*in 1972*	*in 1967*	*in 1972*	*in 1967*	*in 1972*
	%	%	%	%	%	%	%	%	%	%
0	1	1	1	*	*	1	—	*	1	2
1	1	2	1	1	1	2	1	2	1	3
2	61	78	61	75	59	76	59	81	65	81
3	23	11	22	12	22	12	26	9	22	10
4	10	4	12	8	13	5	9	2	7	2
5 or more	1	*	*	—	1	—	*	1	*	—
Ranges	2	3	2	3	2	3	3	3	2	1
No answer	*	1	*	*	*	2	—	1	*	2
Mean number	2·5	2·2	2·5	2·3	2·6	2·2	2·5	2·1	2·4	2·1
Base	2,420	1,384	604	365	593	387	596	404	627	228

Table 2.5 *Women married 1955–62*
Women married 1960–67

A comparison of the percentage distributions and mean numbers of children considered ideal in 1967 and 1972 for couples ‘with no particular worries about money . . .’ (analysed by duration of marriage in 1967 and 1972)

Number of children considered ideal for couples ‘with no particular worries about money . . .’	*Duration of marriage*									
	All durations		*11–12 years*		*9–10 years*		*7–8 years*		*5–6 years*	
	in 1967	*in 1972*	*in 1967*	*in 1972*	*in 1967*	*in 1972*	*in 1967*	*in 1972*	*in 1967*	*in 1972*
	%	%	%	%	%	%	%	%	%	%
0	*	*	*	—	*	*	—	*	*	*
1	*	1	—	*	1	*	*	*	*	1
2	23	44	23	37	22	44	24	47	25	50
3	22	18	22	15	19	18	23	20	22	17
4	42	28	39	37	44	28	42	23	41	25
5 or more	8	3	10	4	9	3	6	3	7	1
Ranges	4	4	5	3	3	4	3	4	4	3
No answer	*	2	*	2	*	3	—	2	—	3
Mean number	3·4	2·9	3·4	3·0	3·5	2·9	3·4	2·8	3·4	2·7
Base	2,420	1,384	604	365	593	387	596	404	627	228

For the various durations of marriage, the decrease in the mean number of children considered ideal for couples ‘like yourselves’ ranged from 0·2 to 0·4 children and this was brought about by an increased emphasis on two children as ideal. The largest difference in the proportion considering two ideal occurred at marriages of seven to eight years’ duration; 59 per cent of women married for this length of time in 1967 considered two ideal for themselves, 81 per cent of those married seven to eight years in 1972 did so. It suggests that families of three or four children became less attractive to couples who were married in 1959–60, though this analysis does not make clear at what point in the marriage this may have occurred.

Similar trends were shown by the number of children said to be ideal for couples 'with no particular worries . . .'. In fact, the difference in mean number of children at each duration was slightly larger than for the former measure and the emphasis on two child families correspondingly greater, particularly among marriages of 10 years' or less duration.

To discount, also, the effects of increased age on changes in opinions about ideal family size—and hence to reinforce the evidence that there had been an actual change in opinion—tables were constructed to compare data for women of similar ages in the two investigations. This would provide evidence on the possibility that changes in opinion between 1967 and 1972 were solely due to the women becoming older. Opinions in 1972 were compared with the opinions of women of similar ages five years earlier. The data are based on the sub-sample of women under 30 years of age in 1967 who were re-interviewed and who would be between 21 and 34 years of age in 1972 and compared with the 1967 answers to the same questions by women who were between 21 and 34 years of age in 1967. The results were similar to those for marriages of the same duration at the two points in time. At each age, the mean number of children considered ideal in 1972 was lower than the mean for 1967. This applied to both measures of ideal numbers of children. It was particularly the younger women in 1972, compared with women of the same age five years earlier, who were less likely to view families of three or four children as ideal for themselves.

All these data indicate that for couples 'with no particular worries . . .' in 1972 an acceptable ideal family consisted, still, of two to four children, but over the five years 1967–72 for this measure and more particularly for couples 'like yourselves', there has been a considerable increase in the proportion of women holding the view that two children are ideal. This change was independent of the fact that these women had been married an additional five years and that they were five years more mature. It is perhaps worth pointing out that any decrease in what is considered an ideal number of children does not extend to none or one child families. The proportions who would consider childless or one child families ideal remain negligible. The fact that the decreased preference for large families over time is so readily discernible from the tables, even when the wife's age and duration of marriage are held constant, suggests that norms about acceptable family sizes have been revised downwards.

In what way have these changes been brought about? For women interviewed in 1967 and again in 1972, further details of the changes in opinion are given in tables 2.6 and 2.7 for the two measures, respectively.

Table 2.6 *Women married 1960–67*
Percentage distribution of children considered ideal in 1972 for couples 'like yourselves' (analysed by the number of children considered ideal in 1967 for couples 'like yourselves')

Number of children considered ideal in 1972 for couples 'like yourselves'	*Number of children considered ideal in 1967 for couples 'like yourselves'*				
	0 or 1	*2*	*3*	*4*	*All numbers*
	%	%	%	%	%
0	(5)	1	1	—	1
1	(15)	3	*	1	2
2	(75)	88	67	55	80
3	—	6	26	13	11
4	(5)	2	5	26	4
5 or more	—	*	*	1	*
No answer	—	1	2	4	1
Base	20	937	309	102	1,384

N.B. The category '5 or more' has been omitted from the 1967 classification. All but one of the 13 women who thought five or more ideal in 1967 had reduced that number in 1972.

In fact, 935 of the 1,384 women in this group had not changed their ideals between 1967 and 1972 for couples 'like yourselves'. Of the remainder, 107 gave a larger ideal family size in 1972 than they had done in 1967 and 323 had revised their ideals downwards since 1967 (the remainder gave no or an unclassifiable answer); that is, 8 per cent had increased the numbers they considered ideal whereas 23 per cent had lower ideals. Opinions for couples 'with no particular worries' showed less stability over the five year period in question. Only 621 of the 1,384 women considered the same number of children ideal in both 1967 and 1972. A further 212 women (15 per cent) had larger ideals in 1972 than in 1967 but 517 women (37 per cent) gave a smaller number as ideal.

Table 2.7 *Women married 1960–67*
Percentage distribution of children considered ideal in 1972 for couples 'with no particular worries about money . . .' (analysed by the number of children considered ideal in 1967 for couples 'with no particular worries about money . . .')

Number of children considered ideal in 1972 for couples 'with no particular worries about money . . .'	*Number of children considered ideal in 1967 for couples 'with no particular worries about money . . .'*					
	0 or 1	*2*	*3*	*4*	*5*	*All numbers*
	%	%	%	%	%	%
0	—	—	*	*	—	*
1	(25)	1	—	1	—	1
2	(75)	68	46	33	23	46
3	—	17	30	14	18	19
4	—	10	20	47	42	29
5 or more	—	1	2	3	16	3
No answer	—	3	2	2	1	2
Base	4	374	376	525	83	1,384

N.B. The category '6 or more' has been omitted from the 1967 classification. All 18 women who thought six or more children ideal in 1967 had reduced that number in 1972.

In the case of couples 'like yourselves' (table 2.6), revisions upward of one child were equally likely to have occurred to those who, in 1967, opted for two or three children as ideal. Six per cent and 5 per cent of women who thought that two or three children were ideal in 1967 had increased their preferences to three or four children, respectively, in 1972. Proportionately fewer of those considering four ideal in 1967 had increased that number in 1972. Conversely, almost equal proportions of those who selected three or four children as an ideal family in 1967 had reduced that number in 1972: 67 per cent of those who thought three ideal in 1967 later changed to two while, of those who had earlier considered four ideal, 13 per cent had changed to three and 55 per cent to two. Thus, over two-thirds of women who in 1967 thought three or four ideal had reduced that number to two so that, in all categories, the majority of women considered a family of two ideal for couples 'like yourselves' in 1972. The largest source of unchanged opinion on this question was found, not unexpectedly, among those who thought two children would be ideal on both occasions: this group accounted for 60 per cent of all respondents.

The two largest groups where ideal numbers of children for couples 'with no particular worries . . .' were concerned—though in total a minority of the women—consisted of those who thought two or four children ideal on both occasions. Eighteen per cent of the women held one or other opinion. Views on the ideal number of children for couples 'with no particular worries . . .' were much more volatile among those who initially thought two children ideal compared with opinions for couples 'like yourselves'. For couples 'like yourselves', the majority (88 per cent) of those who initially thought two ideal confirmed that view in 1972 while among those with a preference for a larger number in 1967, two-thirds had reduced that number in 1972. For the more abstract measure, among those who had originally specified two or three children, between a fifth and a quarter had since increased the number of children they thought ideal. On the other hand, where only a quarter of those who thought four ideal for couples 'like yourselves' in 1967 maintained that view, 47 per cent had done so when asked about the ideal for couples 'with no particular worries . . .'. The lack of financial constraint implied in the more general measure seemed to result in less compulsion to revise ideal family size downward. Nevertheless even on this measure, almost half of those who had chosen three as ideal and a third of those who had selected four in 1967 preferred two in 1972.

Two further aspects of changes in numbers of children considered ideal were investigated: whether changes in ideals were related to changes in the different numbers of children women had on the two occasions and whether changes in ideals were related to the women's assessment of their own fecundity on the two occasions.

While answers to questions on ideal family size suggest a method of tapping the norms which prevail in a community, it is acknowledged that these norms are themselves affected by behaviour. Views about what might be ideal, particularly for couples 'like yourselves', may well be influenced by what actually happens to couples. More specifically, it has been argued that the number of children couples actually have leads to a revision in the number of children they think ideal: where the actual number of children exceeds an earlier stated ideal, this will lead to an increase in the number of children considered ideal and conversely, if for reasons of a growing awareness of infecundity, the original ideal is unlikely to be achieved, this again will lead to a revision of ideals—this time to a decrease.

If this were the case to any marked extent, one would expect the general decline in the number of children considered ideal between 1967 and 1972 to be smaller for those women who had more children in 1972 than they had had in 1967 while an awareness of infecundity in 1972 would have led to a greater than average decrease in the number considered ideal. It was to investigate these questions that the next analyses, presented in tables 2.8 and 2.9, were undertaken.

To reduce the extent of the analysis, the investigation of these two questions was confined to numbers of children considered ideal for couples 'like yourselves'.

Briefly, table 2.8 indicates that overall the mean number of children considered ideal in 1972 was smaller than the mean number derived from the 1967 data regardless of the number of children women had on the two occasions. That is, the reduction in the mean number of children considered ideal in 1972 appears to be characteristic of almost all women whether the number of children they had in 1967 was the same as in 1972 or whether that number had increased.

However, there are interesting differences, though small, between the distributions illustrated in table 2.8. Ignoring those groups with very small numbers of women, the largest decrease in the proportions opting for three or four children as ideal is found among women who in 1967 were childless or had one child, particularly if they had since had one or two children. That is, more of those who initially thought three or four ideal but who had had little experience of children chose two (or possibly one) as ideal in 1972.

The groups least likely to show a decrease in the proportions choosing three or four as ideal were those with two children in 1967. There is a suggestion that those who had since had an additional child were least likely to move away from three as ideal—in fact the proportion thinking three ideal had *increased* from

Table 2.8 *Women married 1960–67*

Percentage distribution and mean number of children considered ideal for couples 'like yourselves' in 1967 and in 1972 (analysed by number of living children in 1967 and in 1972)

Number of living children in 1967	*0*		*1*		*2*		*3*		*4 or more*		*0*		*1*		*2*		*3*		*0*		*1*		*2*	
Number of living children in 1972	*0*		*1*		*2*		*3*		*4 or more*		*1*		*2*		*3*		*4 or more*		*2*		*3*		*4 or more*	
Number of children considered ideal for couples 'like yourselves'	*Number considered ideal in*																							
	1967	*1972*	*1967*	*1972*	*1967*	*1972*	*1967*	*1972*	*1967*	*1972*	*1967*	*1972*	*1967*	*1972*	*1967*	*1972*	*1967*	*1972*	*1967*	*1972*	*1967*	*1972*	*1967*	*1972*
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
0	—	2	—	1	*	1	—	—	—	—	—	1	—	*	—	—	—	—	1	—	—	—	—	—
1	2	2	6	9	—	1	—	2	—	—	1	4	1	—	1	1	—	(4)	1	2	—	—	—	—
2	74	85	73	82	83	87	53	62	(13)	(53)	75	87	69	89	57	61	33	(51)	67	87	52	69	(50)	(62)
3	15	6	16	7	15	8	38	24	(20)	(7)	18	4	23	7	32	34	33	(9)	26	8	35	23	(21)	(13)
4 or more	10	3	5	1	1	3	9	11	(67)	(40)	6	1	2	2	11	3	33	(31)	6	2	12	6	(29)	(21)
No answer	—	1	—	1	—	*	—	2	—	—	1	3	1	1	—	1	—	(4)	—	1	—	2	—	(4)
Mean	2·4	2·1	2·2	2·0	2·2	2·1	2·6	2·5	(3·8)	(2·9)	2·3	2·0	2·4	2·1	2·6	2·4	(3·0)	(2·7)	2·4	2·1	2·7	2·4	2·8	2·7
Base	126		122		231		55		15		136		296		122		45		125		65		24	

32 per cent to 34 per cent for this group. Thus there is some evidence of a rationalisation of views in the direction of changing ideals as a consequence of additional births. But this is partly the result, also, of a move away from an ideal family of four or more children. In specific terms, those with two children in 1967 and three in 1972 showed an increase in the proportion thinking three ideal in 1972, but this was also the result of a decrease in the proportion opting for four. Though there may have been a certain amount of reassessment of views after the birth of a third child, the observed change could also have been brought about by the move away from families of four or more as ideal.

Though it is perhaps not of significance to pursue this argument in terms of women whose families had increased from one to two children in the interim, since most would have preferred two in any case, it is of interest to note that where families had increased from three to four (or more) or from two to four (or more), there was no evidence to suggest that ideal family size had changed in the direction of the actual increase.

Finally, table 2.9 illustrates the changes in ideal number of children in relation to the women's assessment of their future fecundity in 1972. A more detailed discussion of fecundity is to be found in Chapter 5. For the purposes of analysis, here, women's answers to a number of questions on the possibility of their being physically able to have any more children in the future were categorised into three groups: those who were sterile due to an operation or injury affecting conception or whose fecundity was otherwise impaired, those who said that they suffered no impairment in 1972 but thought that they had done so during the previous five years and, thirdly, those who were not aware of any impairment to their fecundity. The object was to investigate whether a growing awareness of infecundity was related to—and hence a possible reason for—changes in the number of children thought ideal.

Table 2.9 *Women married 1960–67*

Percentage distribution of women whose ideal number of children for couples 'like yourselves' had changed/not changed in 1972 compared with 1967 (analysed by future fecundity in 1972)

Number of children considered ideal in 1967 and in 1972	*All groups*	*Future fecundity 1972*		
		Impaired	*Fecund but with past difficulties*	*Fecund*
	%	%	%	%
Same number considered ideal	67	66	75	67
Number in 1972 below that of 1967	23	22	16	24
Number in 1972 above that of 1967	8	11	9	7
Unclassifiable	1	1	1	2
Base	1,384	222	102	1,047

On the face of it, table 2.9 indicates that the distributions for the three fecundity groups were not completely dissimilar though those who had been conscious of some impairment in the five years prior to 1972 were least likely to have revised their estimates downwards. In part, this was because fewer of them had opted for three or more children as ideal in 1967—26 per cent compared with 34 per cent for those who thought themselves fecund. Unfortunately, the present form of the analysis did not allow us to distinguish, within the 'impaired' category, between those who were sterile due to an operation which affected conception and those who had other difficulties of the reproductive system or whose difficulties with childbearing stemmed from an aggravation of other pathological conditions. There is evidence to suggest that those who had undergone a sterilising operation were like the fecund—only more so—while those with other kinds of fecundity impairments tended to be sub-fecund and less ambitious in respect of the number of children they thought ideal.

In this sense—that an awareness of sub-fecundity initially led to the choice of a small family as ideal and that a sterilisation operation was more likely among those with larger families who may have chosen a larger family as ideal—the fecundity of the women could be said to be related to their selection of a particular family size as ideal. But it is unlikely that major *changes* in the number of children thought ideal in the population derive from a growing awareness of infecundity—if only because relatively few women below the age of 40 claim to know of any limitation to their fecundity.

Thus the decline in the number of children said to be ideal remains a phenomenon independent of the marital circumstances, ages and, to a lesser extent, the fecundity of the women, affecting all those married between 1960 and 1967 but to a marginally greater extent, perhaps, those who had only one or no child in 1967 and who initially favoured three or four children as ideal.

2.3 Actual numbers of children

The main purpose of this section is to investigate the distributions of numbers of living children in 1972 for women married between 1960 and 1967 and to compare these with the distributions for women married similar lengths of time, five years earlier. In this way, some idea of differences in family building processes should become apparent. While the data on numbers of children are in no way as comprehensive as those obtained from birth registrations, the availability of socio-cultural data from the survey means that some aspects of differential fertility can be displayed. Data are also available for assessing fertility in relation to a woman's fecundity and the couple's use of family planning. In a later section, the data on actual numbers of children are used in combination with those on ideal numbers of children to obtain an insight into the possible number of 'unwanted' children.

It should be emphasised that the data concern the *current* number of living children in 1972 and 1967 and do not necessarily describe completed families. Therefore, it cannot be assumed that any apparent differences in family size will be maintained when all the families are complete. For example, the differences may be partly attributable to changes in the timing of births. However, all these women had been married at least four and a half years. Ninety per cent

Table 2.10 *Women married 1955–62*
Women married 1960–67

A comparison of percentage distributions and mean numbers of living children in 1967 and 1972 (analysed by duration of marriage in 1967 and 1972)

Number of living children	*Duration of marriage*									
	All durations		*11–12 years*		*9–10 years*		*7–8 years*		*5–6 years*	
	in 1967	*in 1972*	*in 1967*	*in 1972*	*in 1967*	*in 1972*	*in 1967*	*in 1972*	*in 1967*	*in 1972*
	%	%	%	%	%	%	%	%	%	%
0	11	9	9	6	10	6	10	10	15	18
1	21	19	16	13	17	15	22	22	27	29
2	42	47	41	43	40	50	42	51	44	43
3	18	18	19	26	21	23	20	13	13	8
4 or more	9	7	14	13	13	6	6	4	2	1
No answer	*	*	—	—	—	1	—	—	—	*
Mean number	2·0	2·0	2·2	2·3	2·1	2·1	1·9	1·8	1·6	1·4
Base	2,420	1,384	604	365	593	387	596	404	627	228

had had at least one child and 72 per cent had had at least two. It should also be borne in mind that the recall sample excluded all women who said that they were definitely sterile in 1967 (many of whom had had a sterilising operation after having had an above average number of children) and excluded also a disproportionately larger number of women who were childless in 1967 because they proved difficult to trace if they had moved house between 1967 and 1972.

Table 2.10 presents the distributions of number of living children—current family size—by the date of marriage and compares the distributions with those of women who had been married for similar lengths of time five years earlier. Women married between 1960 and 1967 had, on average, 2·0 living children in 1972: this varied from 2·3 for those married in 1960–61 to 1·4 for those married in 1966–67. In 1967, these women had on average 1·2 living children. Not surprisingly, there was a decrease in the proportion of women with three or more living children for the more recent marriages, and a corresponding increase in the proportions of those with none, one and two.

If we compare the 1972 distributions of living children for women married between 1960 and 1967 with the 1967 distributions for those married between 1955 and 1962—in both cases for marriage durations of between five and 12 years—the mean number of living children remained the same (2·0) but the distributions differed slightly. Women married between 1960 and 1967 were more likely to have two children and to be less likely to have only one child. The data also suggest a reduction in childlessness and a reduction in the proportion with four or more children. However, these two circumstances were likely to be, in part, a function of the deficiencies in the recall sample.

Comparisons with official registration data[1] indicate that the survey underestimated the proportion of childless and primiparous women in 1972, particularly at the longer durations of marriage, and consequently emphasised the proportions with two children. The effect on the mean number of children for women married for different lengths of time was negligible, but the distributions do, in fact, differ. This is considered further in Appendix B.

At the different durations of marriage, the differences between the two groups married at an interval of five years became more noticeable. Women married between five and eight years in 1972 were much less likely than those married for the same length of time five years earlier to have had three or four children; four children were also less frequent among those married nine to ten years in

Table 2.11 *Women married 1960–67*

Percentage distribution and mean number of living children in 1972 (analysed by husband's socio-economic group in 1972)

Number of living children in 1972	*Husband's socio-economic group*				
	All groups	*Managerial*	*Other non-manual*	*Skilled manual*	*Other manual*
	%	%	%	%	%
0	9	8	10	9	10
1	19	14	21	20	20
2	47	52	51	47	36
3	18	19	14	18	23
4 or more	7	6	3	7	11
No answer	*	*	*	*	—
Mean number	2·0	2·0	1·8	2·0	2·1
Base	1,384	312	299	556	215

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[1] *Registrar General's Statistical Review of England and Wales 1972 Part II* Tables QQ(b) and QQ(c) HMSO 1974.

1972. Also among those married between five and eight years in 1972, a greater proportion were still childless even though the sample itself was deficient in those childless in 1967. However, there is very little evidence that a substantial proportion of women intend remaining childless or having only one child so that the increase in these proportions is symptomatic of a delay in having children rather than a reduction in the number of children. However, there is every indication that a considerable part of the reduction in the proportions with three or more children will remain an absolute reduction and is not wholly the consequence of a delay in births.

Table 2.12 *Women married 1960–67*
Percentage distribution and mean number of living children in 1972 (analysed by religion)

Number of living children in 1972	*Religion*						
	All groups	*Husband and wife Christian but not Catholic*[1]	*Husband: other Christian Wife: Catholic*	*Husband: Catholic Wife: other Christian*	*Husband and wife Catholic*	*Husband and wife non-Christian*	*All other combinations*
	%	%	%	%	%	%	%
0	9	9	4	8	12	12	10
1	19	19	25	18	17	12	24
2	47	48	41	48	36	52	46
3	18	18	19	19	19	19	13
4 or more	7	6	11	7	16	4	5
No answer	*	*	—	—	—	—	2
Mean number	2·0	2·0	2·1	2·0	2·2	1·9	1·8
Base	1,384	1,002	69	62	86	98	67

Table 2.13 *Women married 1960–67*
Percentage distribution and mean number of living children in 1972 (analysed by age completed full-time education)

Number of living children 1972	*Age completed full-time education*						
	All groups	*Husband and wife both 15 or under*	*Husband 15 or under Wife 16–19*	*Husband 16–19 Wife 15 or under*	*Husband and wife both 16–19*	*Husband 20 or over Wife 19 or under*	*Wife 20 or over Husband any age*
	%	%	%	%	%	%	%
0	9	8	9	13	11	10	6
1	19	19	21	21	16	10	18
2	47	44	50	48	55	38	54
3	18	20	16	16	13	30	16
4 or more	7	9	5	3	5	12	6
No answer	*	*	1	—	*	—	—
Mean number	2·0	2·1	1·9	1·7	1·9	2·2	2·0
Base	1,384	680	117	162	210	50	68

Differential fertility

Differences in mean number of living children exhibited by the different socio-economic groups classified according to the husband's occupation were small. Couples where the husband was in a non-manual (but non-managerial) occupation had, as they have had in the past, the smallest number of children, on average. This was the result of the relatively low proportions with three or four children. The remaining groups in table 2.11 had similar means but the distributions differed. Where the husband was in a managerial occupation, there was a concentration on two children. The proportions with two children decreased for couples with husbands in manual occupations with corresponding increases in the proportions with one child for those in skilled manual occupations and in the proportions with one and with three children for those in non-skilled manual occupations.

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[1] Throughout this report 'Catholic' signifies 'Roman Catholic'.

Differences in the distribution of numbers of children were also apparent when analysed by the couple's religion, although differences in the average number of children were less marked than is popularly expected. The lowest mean was apparent for couples where both husband and wife claimed no religious allegiance or a non-Christian one or where husband and wife had different religions which were not described by the other categories in the religious classification. These groups exhibited a relatively low incidence of four child families; the non-Christian had proportionately more two child families and childless families; couples of mixed religions were more likely to have single children. Among those with Christian affiliations, both childlessness and families of four or more children were more common where both the husband and wife were Catholics while childlessness was least likely where the wife was Catholic. The distributions for those where both partners were Christian but not Catholic and where the husband was Catholic, but not the wife, were very similar.

Variations with respect to educational level were, perhaps, the greatest. The middle-level groups where either the husband or the wife had completed their full-time education between 16 and 19 years of age had the smallest mean number of children and, where the husband completed his education at 16–19, the greatest incidence of childlessness after five years of marriage. Two child families were also more frequent where both husband and wife had completed their education between 16 and 19 years of age. Three and four child families were more likely where the husband had completed his education at 20 or over and his wife at a younger age. Because of small numbers in certain of the subgroups, some categories have been combined. More specifically, women who had completed their education at 20 years of age or over were considered one group, regardless of the ages at which their husbands had finished their education. It was thought that the relatively late age at which they finished their full-time education was likely to result in later marriages and, hence, a smaller than average number of children. In fact, the number was smaller than for some groups but larger than for those where education was completed at a middle level. Furthermore, the group contained the lowest proportion of childless women.

Fecundity

The relationship between a woman's fertility and her assessment of her own fecundity in 1967 and in 1972 is illustrated in tables 2.14 and 2.15. Chapter 5 discusses in greater detail the classification of fecundity that is used in this study but the column heading in the table provides summaries of the characteristics of the different groups. Couples who had had an operation or injury preventing conception before the interview in 1967 were omitted from the 1972 follow-up study so table 2.14 excludes all women who, in 1967, said that it would be impossible for them to have children in the future. The 'probably sterile' in 1967 included those for whom pregnancy was painful or dangerous to their health, or where their doctor thought conception unlikely or advised against it or where the couple's attempts to conceive were unsuccessful. Those described as 'sub-fecund' in 1967 were, in the main, those who suffered from any known physical condition which reduced the chances of conception or where the ages of husband or wife were said to lead to reduction in fecundity. Categories for the 1972 data were changed somewhat, mainly because the 'probably sterile' category in 1967 contained an amalgam of those with difficulties affecting the reproductive system which were likely to have a direct bearing on the woman's chances of having liveborn children and those with other problems which might be aggravated by a pregnancy but which would not directly affect the chances of producing a liveborn child. The separation of these groups was the main difference in the 1972 classification of future fecundity. In both classifications, it needs to be emphasised that the concern was with *future* fecundity: that is, the women's assessment of their chances, in 1967 and in 1972, of physically being able to produce a liveborn child in the future.

Table 2.14 *Women married 1960–67*
Percentage distribution and mean number of living children in 1972 (analysed by future fecundity in 1967)

Number of living children in 1972	*Future fecundity in 1967*				
	All groups	*Probably sterile*	*Sub-fecund*	*Fecund but with past difficulties*	*Fecund*
	%	%	%	%	%
0	9	8	31	2	8
1	19	25	24	16	18
2	47	51	30	56	48
3	18	13	13	19	19
4 or more	7	2	2	6	8
No answer	*	2	—	1	*
Mean number	2·0	1·7	1·3	2·1	2·0
Base	1,384	63	98	111	1,112

Table 2.15 *Women married 1960–67*
Percentage distribution and mean number of living children in 1972 (analysed by future fecundity in 1972)

Number of living children in 1972	*Future fecundity in 1972*						
	All groups	*Husband or wife has had operation or injury preventing conception*	*Difficulties relating to the reproductive system*	*Physical difficulties (not of reproductive system) which would be aggravated by pregnancy*	*Fecund but with difficulties in the past 5 years*	*Fecund*	*Unclassified*
	%	%	%	%	%	%	%
0	9	4	47	(7)	15	7	(38)
1	19	8	20	(29)	31	18	(38)
2	47	33	23	(29)	47	51	(15)
3	18	33	6	(21)	6	18	(9)
4 or more	7	23	3	(7)	1	5	—
No answer	*	*	—	(7)	—	*	—
Mean number	2·0	2·7	1·0	(2·0)	1·5	2·0	(0·9)
Base	1,384	144	64	14	102	1,047	13

Certainly women who had thought, in 1967, that their future fecundity was impaired had had a smaller number of living children, on average, than those who were not aware of any current impairment. The largest mean number of living children was for the group who, though not infecund in 1967, thought that they had had some problems prior to 1967. In fact, this group had, proportionately, the lowest incidence of childlessness and single child families in 1972. This suggests that their views of their own fecundity may have influenced the way they used contraception with a consequent effect on the number of children born. This will be considered further in Chapter 5. Almost one-third of the women who were classified as 'sub-fecund' in 1967 were childless in 1972 and a further 24 per cent had only one child—resulting in an average of 1·3 children for this group. Thus sub-fecundity appeared to be a condition of which women were realistically aware in that its effects could be gauged in the smaller numbers of children born within a period of five to 12 years after marriage, while less precise feelings about reproductive difficulties in the past had, if anything, the opposite effect on the number of children produced.

When all the women married between 1960 and 1967 were classified five years later according to their 1972 views of their fecundity, those who said that they suffered from disabilities of the reproductive system had, on average, the smallest number of living children, deriving from the childlessness which affected 47 per cent of the women. However, those who had had a sterilising operation or injury since 1967 had, on average, the largest number of children. In fact, a disproportionately large number of those who had undergone a sterilising operation had three or four living children. One would infer that the operation was undergone as a consequence of the relatively large number of children.

After five more years of marriage, women appeared to be more realistic than in 1967 about any impairment that they thought they had suffered in the past. Those who, in 1972, thought that they had suffered some degree of infecundity in the previous five years had borne an average of 1·5 living children compared with the average of 2·0 for the completely fecund, and disproportionately more of them had no or one child.

Contraception

The use of contraception by women married between 1960 and 1967 is again considered in greater detail in Chapter 5, where the method of obtaining the data is also described. The data given in table 2.16 merely illustrate the relationship between the *current* situation, contraceptively speaking, and the number of living children.

Table 2.16 *Women married 1960–67*
Percentage distribution of family planning use in 1972 (analysed by number of living children in 1972)

Use of family planning 1972	*Number of living children 1972*					
	All numbers	*0*	*1*	*2*	*3*	*4 or more*
	%	%	%	%	%	%
Operation or injury	10	4	4	7	19	36
Never used any method	4	27	4	1	—	—
Uses reliable methods now	59	29	49	71	63	38
Uses less reliable methods now	12	5	16	14	10	14
Wants baby/is pregnant but:						
used reliable methods previously	8	23	16	4	5	4
used less reliable methods previously	3	4	7	2	1	4
Not using a method for other reasons but:						
used reliable methods previously	1	3	2	*	*	1
used less reliable methods previously	*	—	*	—	*	—
No answer	2	5	2	2	1	3
Base	1,384	126	258	653	250	93

Of those currently childless in 1972, 27 per cent said that they had never used any method of contraception, 34 per cent were currently using some method of family planning and a further 27 per cent were, or were waiting to become, pregnant but had previously used some method of family planning. Of those who were using or had previously used contraception, the majority had employed what were classified as the more reliable methods—the pill, IUD, sheath and diaphragm with a spermicide.

Apart from the childless, only a very small proportion of women had never used any method of contraception. The more reliable methods of contraception were more frequently in current use by those with two children, marginally less frequently by those with three—where sterilisation was more frequent—and again, marginally less frequently by those with one child. The use of the less reliable methods of contraception declined from those with one to those with three children and showed a slight increase for those with four children, but, as Chapter 5 illustrates, the use of the less reliable methods of contraception by all the married women investigated declined considerably between 1967 and 1972. Among those with four or more children, over a third were sterile, usually as the result of an operation, while a further 38 per cent were using the more reliable methods of contraception.

One would conclude from the data that family regulation was universally accepted by married couples in England and Wales and that childlessness was the main reason for not using contraception. Where couples had four or more children sterilisation became more important as a technique for family regulation.

2.4 Ideal and actual numbers of children

Having described the number of living children born by 1972, to women married between 1960 and 1967, an attempt is made in this section to obtain an estimate of the proportion of children who were in excess of the number considered ideal in 1972 or whose birth was not wanted. In one sense the concept of ideal family size can be used as a yardstick against which to measure satisfaction with the current situation. Two measures have been included, neither of them, because of the very nature of the information required, completely satisfactory. The first is the measure of 'excess fertility' used in 1967 but with the 1972 ideal numbers substituted for those given in 1967. The measure is based on a comparison of the stated ideal ('like yourselves') and actual family sizes and where these were equal or the actual number was fewer than the ideal number, answers to the question 'When you had (NAME OF LAST CHILD) did you feel you had *more* children than you really wanted?' were included. The last question was, however, only asked of those who, at the time of the interview, already had more than one living child. Thus, this summary measure is confined to women with two or more living children. Furthermore, the comparison of ideal with actual numbers of children is made on the basis of the 1972 information: at the time the children were born, the number of children considered ideal may well have been greater with a consequent reduction in the proportion of women with children in excess of their current ideals.

The second measure is based on births which took place between 1967 and 1972 and which were said to be unwanted. The main object of the questions in this subject area was to investigate whether births had taken place *when* they were wanted and this discussion is pursued in Chapter 4. In addition, information on births which were said to be totally unwanted was obtained and this was used as a measure of the number of children who were unwanted at the time of their births. However, the births were those to women married between 1960 and 1967 and they do not refer to all births occurring between 1967 and 1972.

Table 2.17 *Women married 1960–67*

Percentage distribution and mean number of children considered ideal in 1972 for couples 'like yourselves' (analysed by number of living children in 1972)

Number considered ideal in 1972 for couples 'like yourselves'	*Number of living children 1972*					
	All numbers	*0*	*1*	*2*	*3*	*4 or more*
	%	%	%	%	%	%
0	1	2	1	1	—	—
1	2	2	6	*	1	2
2	78	83	83	86	58	55
3	11	6	5	8	29	9
4 or more	5	3	1	2	6	31
Ranges	3	2	2	3	5	—
No answer	1	1	2	1	1	3
Mean number	2·2	2·2	2·0	2·1	2·5	2·7
Base	1,384	126	258	653	250	93

Table 2.18 *Women married 1960–67*

Percentage distribution and mean number of children considered ideal in 1972 for couples 'with no particular worries about money . . .' (analysed by number of living children 1972)

Numbers considered ideal in 1972 for couples 'with no particular worries about money . . .'	*Number of living children 1972*					
	All numbers	*0*	*1*	*2*	*3*	*4 or more*
	%	%	%	%	%	%
0	*	*	—	*	—	—
1	1	2	2	*	—	—
2	44	47	48	51	28	22
3	18	12	18	18	24	9
4 or more	31	30	24	26	40	66
Ranges	4	6	4	4	6	1
No answer	2	2	3	2	2	3
Mean number	2·9	2·9	2·7	2·8	3·1	3·6
Base	1,384	126	258	653	250	93

Before going on to assess the incidence of unwanted births, tables 2.17 and 2.18 illustrate, for all women married between 1960 and 1967, the relationship between the number of children they had in 1972 and the number they thought was ideal. Compared with the average of 2·0 children which actually women had at the time of the 1972 interview, 2·2 children, on average, were thought ideal for couples 'like yourselves', 2·9 were thought ideal for couples 'with no particular worries about money . . .'. Apart from childless women, the mean number of children considered ideal on both measures increased with an increase in the number of children the women actually had. Childless women had, on average, an ideal similar to that of women with two or three children.

A considerable proportion of women with no or one child had fewer children than they thought ideal for couples 'like yourselves'. For both the childless and those with one child, an overwhelming majority (83 per cent) of women thought that two were ideal; only 6 per cent of those with one thought that one was ideal. The greatest correspondence between ideal and actual family sizes occurred where women had two living children; 86 per cent thought two ideal for couples 'like yourselves' while a further 10 per cent preferred three or more children.

Women of higher parities were more likely to have exceeded the number of children they thought ideal in 1972: only 29 per cent of women with three children thought this an ideal number in 1972 and 58 per cent preferred two children. Similarly, 55 per cent of women with four or more living children said that two were ideal for couples like themselves. The number of children which women of higher parities considered ideal for couples 'with no particular worries . . .' seemed more closely related to the actual number of children they had: 66 per cent of women with four or more children considered that number ideal for couples 'with no particular worries . . .' whereas 31 per cent had thought that number ideal for couples like themselves.

Altogether, 17 per cent of women had more children than they thought ideal for couples 'like yourselves' in 1972 and 8 per cent had more than they thought ideal for couples 'with no particular worries . . .'. In 1967, the comparable proportion for couples 'like yourselves' for these women was 4 per cent. In addition, if the number of children women actually had in 1972 was compared with the number they thought ideal for couples like themselves in 1967, 15 per cent were in excess of their ideals. Thus, despite the overall decline in the number of children thought ideal, the proportion of all women who had exceeded that number in 1972 remained approximately the same whether the comparison was made with ideals in 1967 or with ideals in 1972.

The number of children currently unwanted was gauged in relation to the number of children considered ideal for couples 'like yourselves' and, for those who had equal or fewer children than they thought ideal, whether the last child was wanted or not. The analysis was restricted to women who had two or more living children in 1972 because it was thought inappropriate to ask women with only one child whether their last child was really wanted. This does not rule out the possibility that some informants with only one child may have felt that this child was not really wanted at the time of the birth.

Table 2.19 *Women married 1955–62 with two or more living children in 1967*
Women married 1960–67 with two or more living children in 1972

Percentage of married women who had more or fewer children than considered ideal for couples 'like yourselves 'and who had wanted/not wanted their last child (analysed by duration of marriage in 1967 and 1972)

	Duration of marriage									
	All durations		*11–12 years*		*9–10 years*		*7–8 years*		*5–6 years*	
	in 1967	*in 1972*	*in 1967*	*in 1972*	*in 1967*	*in 1972*	*in 1967*	*in 1972*	*in 1967*	*in 1972*
	%	%	%	%	%	%	%	%	%	%
Those who had more living children than considered ideal	12	24	19	33	17	25	8	21	3	13
Those who had equal or fewer children than considered ideal and:										
last child not wanted	5	3	4	3	5	3	7	2	4	2
last child wanted	75	69	68	60	71	69	76	72	86	81
last child, don't know whether wanted	8	4	9	3	7	3	9	5	6	4
Base: those with two or more living children	1,577	1,000	428	297	409	307	385	277	355	119

Comparing the data obtained in 1967 for women married between 1955 and 1962 with those obtained in 1972 for 1960–67 marriages (table 2.19), the largest increase was in the proportion of women who had more children than they currently thought ideal and this applied at all durations of marriage.

In 1967, it was suggested that women with four or more children or who had married early were more likely to have exceeded their ideals by the time their families were completed. Although not confined to completed families, the analysis of the 1972 data suggests that this is still the case but that an increasing proportion of those with three children had exceeded their current ideals.

Neither in 1967 nor in 1972 was the proportion where the child was unwanted large for those who had children equal to or fewer than the number they thought ideal. It needs to be borne in mind, also, that exceeding the number of children they thought ideal in 1972 does not imply that the children last born were necessarily unwanted at the time they were born. At that time, the women may have had different ideals.

Table 2.20 *Women married 1960–67 and having two or more living children in 1972*
Percentage of married women who had more or fewer children than considered ideal in 1972 for couples 'like yourselves' and who had wanted/not wanted their last child (analysed by number of living children in 1972)

	Number of living children 1972		
	2	*3*	*4 or more*
	%	%	%
Those who had more living children than considered ideal in 1972	2	65	79
Those who had equal or fewer children than considered ideal in 1972 and:			
last child not wanted	3	4	1
last child wanted	91	28	19
last child, don't know whether wanted	4	2	1
Base: those with two or more living children	653	250	93

Nevertheless, 79 per cent of women with four or more children had more children than they thought ideal in 1972 and in addition 1 per cent said that their last child was unwanted. A similarly high proportion (65 per cent) of those with three children had also exceeded the ideal number. Very few of those with two had more children than they thought ideal, but 3 per cent of these women said that their last child was unwanted (table 2.20).

Table 2.21 *Women married 1960–67 and having two or more living children in 1972*
Percentage of married women who had more or fewer children than considered ideal in 1972 for couples 'like yourselves' and who had wanted/not wanted their last child (analysed by wife's age at marriage)

	Wife's age at marriage				
	All ages	*Under 20*	*20–22*	*23–24*	*25 and over*
	%	%	%	%	%
Those who had more living children than considered ideal in 1972	24	31	22	25	19
Those who had equal or fewer children than considered ideal and:					
last child not wanted	3	4	2	3	3
last child wanted	69	61	74	71	73
last child, don't know whether wanted	4	5	3	2	5
Base: those with two or more living children	1,000	332	399	138	131

Tables 2.21–2.24 illustrate some of the characteristics of those who had more children than they thought ideal in 1972. As in 1967, women married under 20 were most likely to have more children than they thought ideal and also to have proportionately more unwanted children. The most striking feature of the

Table 2.22 *Women married 1960–67 and having two or more living children in 1972*
Percentage of married women who had more or fewer children than considered ideal in 1972 for couples 'like yourselves' and who had wanted/not wanted their last child (analysed by husband's socio-economic group)

	Husband's socio-economic group				
	All groups	*Managerial*	*Other non-manual*	*Skilled manual*	*Other manual*
	%	%	%	%	%
Those who had more living children than considered ideal	24	22	19	27	34
Those who had equal or fewer children than considered ideal and:					
last child not wanted	3	2	2	2	8
last child wanted	69	72	74	68	56
last child, don't know whether wanted	4	4	5	3	3
Base: those with two or more living children	1,000	243	205	400	151

Table 2.23 *Women married 1960–67 and having two or more living children in 1972*
Percentage of married women who had more or fewer children than considered ideal in 1972 for couples 'like yourselves' and who had wanted/not wanted their last child (analysed by age completed full-time education)

	Age completed full-time education						
	All groups	*Husband and wife both 15 or under*	*Husband 15 or under Wife 16–19*	*Husband 16–19 Wife 15 or under*	*Husband and wife both 16–19*	*Husband 20 or over Wife 19 or under*	*Wife 20 or over Husband any age*
	%	%	%	%	%	%	%
Those who had more living children than considered ideal	24	29	22	19	18	(38)	19
Those who had equal or fewer children than considered ideal and:							
last child not wanted	3	3	4	4	1	—	2
last child wanted	69	64	71	74	81	(53)	77
last child, don't know whether wanted	4	4	2	4	1	(10)	2
Base: those with two or more living children	1,000	498	125	107	154	40	52

differences in the socio-economic groups was the proportion of women with husbands in non-skilled manual occupations whose last child was unwanted even where their ideal number of children had not been exceeded. In section 2.3 it was shown that there was very little difference in the actual mean number of children for women with husbands in the managerial, skilled manual and non-skilled manual occupations (2·0, 2·0 and 2·1 respectively). However, only 22 per cent of those with husbands in managerial occupations had more children than they thought ideal, compared with 34 per cent of those in the last category. Taking the proportions of those with children in excess of their ideals, together with those of unwanted last births, then 24 per cent of women with husbands in managerial occupations had more children than they thought ideal or wanted in 1972 compared with 42 per cent of those with husbands in non-skilled manual occupations.

Table 2.24 *Women married 1960–67 and having two or more living children in 1972*
Percentage of married women who had more or fewer children than considered ideal in 1972 for couples 'like yourselves' and who had wanted/not wanted their last child (analysed by religion)

	Religion						
	All groups	*Husband and wife Christian but not Catholic*	*Husband: other Christian Wife: Catholic*	*Husband: Catholic Wife: other Christian*	*Husband and wife Catholic*	*Husband and wife non-Christian*	*All other combinations*
	%	%	%	%	%	%	%
Those who now have more living children than considered ideal	24	25	(25)	(35)	26	26	(16)
Those who now have equal or fewer children than considered ideal but:							
last child not wanted	3	3	(2)	(4)	3	4	(2)
last child wanted	69	69	(70)	(56)	66	69	(80)
last child, don't know whether wanted	4	4	(4)	(4)	5	1	(2)
Base: those with two or more living children	1,000	726	49	46	61	74	44

Exceeding in 1972 the number of children thought ideal was also more frequent among couples where both had completed their education at 15 and, though numbers were small, where the husband but not the wife completed his education at 20 or over. Couples where the wife had completed her education at 20 or over, regardless of the husband, and those where the husband had completed his at 16–19, were least likely to have more children than they thought ideal.

Though again numbers were small, couples where the husband, but not the wife, was Catholic were more likely to have more than their ideal number of children. It will be remembered that couples in which both partners were Catholic had the largest mean family size of 2·2 children. If only one partner was Catholic the number of children tended to be marginally greater if the wife rather than the husband was Catholic. However, table 2.24 shows that couples in which only the husband was Catholic were most likely to have exceeded their ideals. Thirty-five per cent had more children than considered ideal for couples like themselves and 4 per cent said that they had not wanted their last child. This is a surprisingly high proportion in view of the fact that this group had a comparatively small mean family size of 2·0 children. However, a possible explanation is that non-Catholic women married to Catholic men (but not vice-versa) less frequently used the more reliable methods of family planning and were, therefore, likely to exceed any targets they set themselves.

Thus, having more children than was currently thought ideal was a function of the mechanistics of marriage—duration and the age at which the wife had married—but it was also influenced by cultural assumptions reflected in the variations by socio-economic group, educational level and religion. Couples with lower levels of education and in non-skilled manual occupations and couples where the husband was Catholic more frequently had exceeded their current ideals. Unwanted children, even where the ideal family size had not been exceeded, occurred more frequently where husbands were in non-skilled occupations.

The second estimate of unwanted births was obtained by asking the women about the circumstances in which they had conceived and had had liveborn children during the five years 1967 to 1972 and whether they had wanted the child or not at that time. The analysis has been carried out in terms of the number of living children born to the interviewed women in this period, but it does not, of course, refer to all such births in the interval since those occurring in marriages taking place after 1967 were not included. For each of the live births occurring in the interval, women were asked whether they became pregnant after they deliberately stopped using a method of family planning or whether they conceived under various other circumstances and, if the latter, whether the child was wanted at that time or at some other time or not at all. Other details were also obtained but these will be considered further in the chapter dealing with the timing and spacing of births.

Table 2.25 *Living children born between 1967 and 1972 to women married 1960–67*
Number and percentage of living children wanted/not wanted at time of birth (analysed by parity of birth)

	Parity												*Expected births*	
	All parities		*1st*		*2nd*		*3rd*		*4th*		*5th or later*			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Liveborn between 1967 and 1972 interviews	1,160	100	223	100	469	100	298	100	114	100	56	100	77	100
No answer to circumstances of birth	17	1	3	1	4	1	6	2	4	4	—	—	7	9
Born less than 9 months after marriage	14	1	14	6	—	—	—	—	—	—	—	—	—	—
Born after parents deliberately stopped family planning	709	61	151	68	346	74	151	51	38	33	23	41	49	64
Born under other circumstances	*420*	*36*	*55*	*25*	*119*	*25*	*141*	*47*	*72*	*63*	*33*	*59*	*21*	*27*
and														
Wife wanted/didn't mind child at that time	224	19	45	20	77	16	60	20	29	25	13	23	7	9
Wife wanted child but *not* at that time	70	6	9	4	25	5	25	8	10	9	1	2	1	1
Wife did not want child at all	126	11	1	*	17	4	56	19	33	29	19	34	13	17

Table 2.25 presents the data analysed by the parity of the birth. Of the 1,160 live births which had occurred to these women between 1967 and 1972, 709 were said to have been conceived after the couple had deliberately stopped using family planning, in order to have a child, and 420 were born as a result of some other circumstances. Of these latter births, 126 were said not to be wanted at all; that is, 11 per cent of all the births to these women were unwanted and this proportion increased to 19 per cent of all third births, 29 per cent of all fourth births and 34 per cent of all fifth or higher order births in the years 1967–72. Similar questions were also asked of women who were currently pregnant. Of the 77 women who were actually expecting a birth, 13 (17 per cent) said that they did not want the child at all.

2.5 Wasted pregnancies

The number and spacing of births were limited to a certain extent by 'wasted' pregnancies. These are defined as pregnancies ending in a miscarriage, abortion or stillbirth.

With the increasing improvements in pre-natal medical care one might expect the number of wasted pregnancies to have declined in more recent years. However, this may have been offset to some extent by the increase in legal abortions which occurred after the passage of the 1967 Abortion Act. Two hundred and ninety-two (21 per cent) of the sample women married between 1960 and 1967 said that they had had one or more pregnancies ending in a miscarriage, stillbirth or abortion, and the total number of wasted pregnancies experienced by these women was 364. Over 80 per cent were said to be the result of 'miscarriages'. For individual women, the chance of a wasted pregnancy increased with the total number of pregnancies. More than one-third of women who had been pregnant three times had one wasted pregnancy and 55 per cent of those women who had had a total of four pregnancies had had one or more pregnancies which did not end in a live birth. The proportion of women with one or more wasted pregnancies rose to 76 per cent when women with five or more pregnancies were considered. However, in some cases, women with a large number of pregnancies may have had recourse to abortion as a means of family limitation and it is therefore necessary to break down 'wasted' pregnancies into pregnancies ending in abortion and those ending in other ways.

The proportions of women who claimed to have had a legal abortion by 1972 were nonetheless very small. None of the women who were married between 1960 and 1967 and with two or fewer pregnancies by 1972 admitted to an abortion but 4 per cent of women with three pregnancies and 7 per cent of women with four or more pregnancies said that they had had one or more abortions when interviewed in 1972. However, the number of pregnancies which were classified as ending in a miscarriage may also include a number of abortions which women were reluctant to admit to or which were carried out before the Abortion Act came into force in 1968.

Wasted pregnancies may have little effect on ultimate family size but they obviously have some effect on the spacing of births and may indirectly lessen the probability of a woman having more children if they occur fairly late in the child-bearing cycle. A woman may not attempt to have more children after a pregnancy which did not end in a live birth, especially if the pregnancy was unplanned. The subject of pregnancy losses does illustrate one area in which the fertility of women is not readily within their control.

2.6 **The opinion of the husband on family size**

All women who had had one or more living children were asked how many children they thought their husband wanted, counting those they already had. Therefore, although the tables in this section refer to the number of children the husband wanted, it should be remembered that it was really the wife's report of her husband's family intentions with which we were concerned. Inevitably, this suggests an element of rationalisation on the part of the woman, particularly if she was not sure of her husband's views on this matter.

Table 2.26 *Women married 1960–67 and with one or more living children*
Percentage distribution of number of children said to be wanted by husband in 1972 (analysed by number of living children in 1972)

Number of children said to be wanted by husband in 1972	*Number of living children in 1972*				
	All groups	*1*	*2*	*3*	*4 or more*
	%	%	%	%	%
1	7	35	*	—	—
2	52	56	77	1	3
3	27	6	17	84	—
4 or more	12	1	4	14	95
Ranges	*	*	*	*	—
No answer	2	2	1	1	2
Mean number	2·5	1·7	2·3	3·2	4·3
Base: those with one or more living children	1,258	258	653	250	93

The mean number of children wanted in 1972 by husbands who were married between 1960 and 1967 was 2·5, rather higher than the mean number of 2·2 children which the wives considered ideal for couples like themselves. It also suggested that many husbands were credited with wanting more children than they already had since the mean number of living children in 1972 for all couples married between 1960 and 1967 was 2·0. Proportionately more husbands were said to want three or four children.

Table 2.26 shows the relationship between actual family size and the number of children said to be wanted by the husband. Although 56 per cent of husbands with one living child were reported as wanting two children, the wives of 35 per cent said that their husbands only wanted one child. In general the majority of men were said to want the number of children which they already had. Thus 77 per cent of men with two children were reported to want this number and the proportion increased to 95 per cent for husbands with four or more children. These figures may indicate a tendency for wives to report that their husbands wanted the number of children they actually had at the time of interview but it should be remembered that this process of rationalisation, if any, did not seem to be at work when women were asked about their own ideal family sizes. Although 95 per cent of women with four or more children reported that their husbands wanted four or more children, 79 per cent of these same women said that they themselves had more children than they considered ideal for couples like themselves (table 2.20).

Table 2.27 *Women married 1955–62 and with one or more living children*
Women married 1960–67 and with one or more living children

Percentage distributions and mean numbers of children said to be wanted by husbands in 1967 and 1972 (analysed by duration of marriage in 1967 and 1972)

Number of children said to be wanted by husband	*Duration of marriage*									
	All durations		*11–12 years*		*9–10 years*		*7–8 years*		*5–6 years*	
	in 1967	*in 1972*	*in 1967*	*in 1972*	*in 1967*	*in 1972*	*in 1967*	*in 1972*	*in 1967*	*in 1972*
	%	%	%	%	%	%	%	%	%	%
1	8	7	7	9	7	5	7	7	8	9
2	46	52	44	40	43	52	46	59	51	59
3	25	27	24	31	24	31	27	22	26	22
4 or more	18	12	22	19	21	10	16	10	11	7
Ranges	—	*	—	—	—	1	—	1	—	*
No answer	4	2	3	2	4	2	4	1	4	3
Mean number	2·6	2·5	2·7	2·7	2·7	2·5	2·6	2·4	2·5	2·3
Base: those with one or more living children	2,126	1,258	541	344	527	363	527	365	531	186

Table 2.27 compares the current distribution of the number of children said to be wanted by husbands with that of couples married for the same length of time in 1967. For marriages of less than 11 years' duration, women in 1972 said that their husbands wanted fewer children, on average, than women had said five years earlier: for example, women married seven to eight years in 1972 said that their husbands wanted an average of 2·4 children compared with an average of 2·6 children said to be wanted by those married seven to eight years in 1967. The reduction occurred mainly in the proportion who were said to want four or more children and not, to the same extent, in the proportion wanting three, as was the case for women stating their own ideal number for couples 'like yourselves' (table 2.4). In general, however, the reported opinions of the husbands on family size had changed only marginally in favour of smaller families com-

pared with marriages of similar durations which had taken place five years previously. This shift was not as marked as the shift in ideals from the four to the two child family discussed in section 2.2.

However, this slight shift downwards in the numbers wanted by husbands who had been married for the same length of time at an interval of five years was not reflected in the actual changes registered for the *same* group interviewed on the two occasions. This is the result of the questioning on the two occasions being confined to women with one or more living children. Those who had one child already in 1967 were likely to have had more children and to have increased the number wanted by 1972; the omitted group had fewer children and were likely, five years later, to want fewer children. The information is summarised in table 2.28.

Table 2.28 *Women married 1960–67*
(i) Those with one or more living children in 1967 and 1972
(ii) Those with one or more living children in 1972 but not 1967
(iii) Those with one or more living children in 1972
Percentage distribution and mean number of children said to be wanted by husband in 1967 and in 1972

Number of children said to be wanted by husband in 1972	*(i) One or more living children in 1967 and in 1972*							*(ii) One or more living children in 1972 but not in 1967*	*(iii) One or more living children in 1972*
	Number of children said to be wanted by husband in 1967								
	1	*2*	*3*	*4 or more*	*No answer*	*All numbers*	*Mean number*		
	%	%	%	%	%	%	%	%	%
1	3	3	*	—	*	6	1·5	11	7
2	2	35	6	2	3	47	2·2	69	52
3	*	13	12	4	1	31	2·7	13	27
4 or more	*	3	5	5	1	14	3·2	4	12
No answer/ranges	*	1	*	—	*	1	—	3	2
All numbers	6	55	23	10	5	100[1]	2·4	100[2]	100[3]
Mean number	1·2	2·3	3·3	4·0	2·8	2·6	—	2·1	2·5

[1] 100% = 998 [2] 100% = 260 [3] 100% = 1,258

Among those who had at least one child in 1967 (and in almost all cases had one or more children in 1972), there had been a slight increase in the number of children said to be wanted by husbands; this is the result of an increase in the proportion of women who, in 1972, said that their husbands wanted three or more children. Thirty-one per cent of these women said that their husbands wanted three children in 1972 compared with 23 per cent in 1967; 14 per cent compared with 10 per cent said that four children were wanted. Of the 45 per cent who said their husbands wanted three or four in 1972, 16 per cent had previously said two were wanted, 17 per cent had said three and 9 per cent four.

However, all these women had already had at least one child in 1967. If we compare the statements of these women about their husbands' preferences in 1972 with those of the women without children in 1967 ((ii) in table 2.28), the husbands of the childless in 1967 (but with children in 1972) were said to want fewer children—an average of 2·1 children compared with 2·6 for those who had had children in 1967. Sixty-nine per cent were said to want two children in 1972 compared with the 47 per cent of those with children in 1967; only 17 per cent were said to want three or more children compared with 45 per cent of the latter. Combining these two groups, as in column (iii) in table 2.28, gives the distribution of husbands' reported preferences in 1972—one which shows a small decrease compared with couples married for similar lengths of time five years earlier.

2.7 Summary

Between 1967 and 1972, the mean number of children considered ideal both for couples 'like yourselves' and for couples 'with no particular worries about money or anything like that' declined for women who were married between 1960 and 1967. This decline was not accounted for by changes in the duration of the marriages, in the ages of the women, in their fecundity or in their actual family size. The decline affected all married women but to a marginally greater extent those who had no or one child in 1967 and who initially favoured three or four. Since the decline was relatively independent of the women's circumstances and appeared to affect them all, this suggests that norms about family size had been revised downward. Although the ideal family was still considered to consist of two to four children, there was, in 1972, a substantial increase in the proportion who considered two rather than three or four ideal, particularly for couples 'like yourselves'.

By 1972, 90 per cent of these women had had at least one child and 72 per cent had had at least two. Compared with women who had been married for the same length of time five years earlier, proportionately fewer of the women interviewed in 1972 were childless and fewer had four or more children. However, of greater importance in assessing changes in family building were the differences in marriages of relatively short duration. Women married between five and eight years in 1972 were much less likely than those married for the same length of time five years earlier to have had three or more children, while proportionately more of those married five to six years in 1972 were still childless. There is very little evidence to suggest that an increasing proportion of women intend remaining childless so that an increase in this proportion is symptomatic of a delay in child-bearing. However, there are indications that some, at least, of the reduction in the proportion with three or more children will remain an absolute reduction.

Comparisons of actual and ideal family sizes showed that a substantial proportion of women with three or more children were in excess of their ideal number of children in 1972. Moreover, analysis by the socio-economic group of the husband indicated that 42 per cent of wives with husbands in non-skilled manual occupations had more children than they thought ideal for couples 'like yourselves' or they said their last child was unwanted. The comparable proportion for those in managerial occupations was 24 per cent although the mean actual family size for both groups was similar.

The number of children said to be wanted by husbands in 1972 also declined in comparison with marriages of similar durations five years earlier, but this shift was less marked than the downward revision of ideal family size.

3 Expected family size

3.1 **Introduction**

The 1972 investigation set out to assess the value of the statements made by women in 1967 about the number of children they expected to have altogether. The value of such statements lay in their possible use as a surrogate measure for final family size, or, at least, as an indication of changing trends in family size in the aggregate. If one or both of these possibilities could be realised, then the additional information could be used as a guide to the assumptions on which the extrapolation of future births is based. That is, in addition to the experts' views on whether the number of births in the immediate future was likely to increase or decrease, there would be available an opinion expressed by one of the groups most concerned—the married women in England and Wales. As an aid in fertility projections, the technique would only be of value if it can anticipate changes in trends more adequately than the experts' opinions.

In 1967, the women interviewed were asked how many children they *expected* to have altogether. By asking it in these terms, and in considerable detail, the evidence from the pilot stages of the investigation suggested that women were aware of and would take into account their current and likely future circumstances and the firmness of their intentions in arriving at a figure (or range of figures) which, on the whole, reflected the number of children they thought they would have.

A number of concepts have been used in fertility studies to approximate the number of children a woman would have altogether. The most usual questions ask a woman the number of children she intends to have or the number she expects to have. *Desired* family size and *ideal* family size are also concepts that appear in studies of the subject. Naturally enough, these concepts are not always clearly distinguishable in the minds of the women being interviewed. Evidence from the GAF study suggested virtually no differences, on average, between the number of children women *expected* to have and the number they *intended* to have in the future and 87 per cent of the sample gave the same answer on additional intended and additional expected number of children.[1] For our purposes, in 1967, questions dealing with expectations seemed better able to reflect, in so far as it is possible to do so, the problems of fecundity and family planning which would affect the final size of a woman's family. Obviously, some women would be better able to take these problems into account than others, but, overall, it was thought more reasonable to try to incorporate these aspects of uncertainty into the measure despite the lower reliability of expected compared with intended family size. In 1972, the questions were identical because we were concerned not only with the relationship between expected family size in 1967 and actual family size five years later but also with the stability of women's expectations so that we could gauge to what extent the number of children a woman *expected* to have was a function of the point in her marriage at which she found herself and to what extent it remained unchanged or reflected external events. This illustrates the common dilemma of either retaining the original questions for the purposes of comparability or trying to improve the measure of expected family size.

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[1] Norman B Ryder and Charles Westoff *Reproduction in the United States 1965* Princeton University Press.

Thus, the object of the 1972 follow-up investigation was to assess the value of the opinions expressed by the women in 1967 in the light of subsequent events during 1967–72. To what extent had the expectations about future numbers of children expressed by the women interviewed in 1967 been realised? Which women had exceeded the numbers of children they expected, who had fallen short and why? Did infecundity and family planning failures mediate to any measurable extent between expectations and realisation? How many women changed their minds? Above all, were the opinions which women expressed about the sizes of family they expected to have highly volatile, or was there a point within the marriage continuum at which these opinions stabilised and were sufficiently related to final family size to be used as a surrogate measure sufficiently ahead of family completion to be practically useful for fertility projection purposes?

Previous American studies based on independent samples of women at two points in time suggested that, in the aggregate, the mean number of children expected coincided with the number actually born within a period of five years. In part, this came about by conflicting movements resulting in very little net difference—younger, Catholic women overestimated the number of children they had, the poorly educated underestimated; similarly those married closest to the date of interview overestimated, those married earlier were more likely to give an estimate which was realised in practice. However, estimates in the aggregate which relied on a fortuitous cancelling of opposing errors are not satisfactory as a continuous method of assessing likely future action—the balance between over- and under-estimation may well change for reasons which cannot be anticipated. The Princeton Fertility Studies,[1] based on three interviews with the same group of women who, in 1957, had given birth to a second child, came to the conclusion that absolute stability in family size desires was low, but the variation was also very small. While only one-third of the women had the same family size *desires* at each of the three interviews, the response of 85 per cent at the third interview some six to ten years after the first was within one child of that at the first. In part, the variation was attributed to the problems of measurement. The range of variation these problems entail is illustrated in the next section.

It is with the issues of the range of possible measures, of the compatibility of the 1967 statements with subsequent events and of the views of the women in 1972 about the size of family they expect that this chapter is concerned.

3.2 The questions asked and the measure used

Asking women about the number of children they expect to have altogether does not necessarily provoke a single answer particularly when allied to statements about the strength of these expectations. Almost all women, when asked, are prepared to give a number or a range of numbers, in answer to questions on the number of children they expect to have. These answers are amplified if women are asked how strongly committed they feel to the numbers they have specified. In some cases, this leads to answers given in terms of the maximum and minimum number of children expected. For those women who say they do not expect any more children decisions have to be made about the numerical value assigned to them to represent the size of family they expect to have. Therefore, a range of possible 'expected family sizes' presents itself for each woman.

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[1] Larry L Bumpass and Charles F. Westoff *The Later Years of Childbearing* Princeton University Press.

In 1967, the main questions from which the measures of expected number of children were derived were:

Q.57 Do you expect to have any (more) children (after this baby)?
Would say definitely yes, probably yes, you're uncertain, probably no or definitely no?
(PROBE IF NECESSARY: 'Well what do you think?')
(*If definitely/probably yes or uncertain*)

Q.58 How many children do you expect to have altogether (counting those you have now)?
If D.K. number

a. Are you uncertain because you may change your mind later or because you may have children you haven't planned for?
b. Does the number depend on whether you have children of the sex you want?
c. What do you think is the largest number of children you will have altogether (counting those you have now)—your best guess?
d. And what do you think is the smallest number of children you will have altogether (counting those you have now)—your best guess?

If number specified (Q.58)

e. How sure are you that you will have .... children—very sure, fairly sure, not too sure?

If fairly sure/not too sure

i. Are you not very sure because you may change your mind later on or because you may have children you haven't planned for?
ii. What you think is the largest number of children you will have in all (counting those you have already)—your best guess?
iii. What do you think is the smallest number of children you will have in all (counting those you already have)—your best guess?

(*To those who in Q.57 said that they probably/definitely would not have any more children.*)

Q.60 What if anything would make you change your mind and have more children?

a. If you were to have any more children what would be the largest number of children you would expect to have altogether (counting those you have now)—your best guess?

The questions were altered slightly where necessary for those who said that there were medical difficulties in having more children (the prompt question equivalent to Q.57 asked 'Do you *hope* to . . .') while those who said it was medically 'impossible' for them to have any more more children were also asked:

Q.48 If something happens so that you can have a child (of your own) later on, do you expect that you will?

a. If you find that you can have children (of your own) how many would you expect to have in all (counting those already born to you)—your best guess?

The questions used in 1972 were simplified but were essentially the same.

In 1972, 68 per cent of the women apparently fecund said that they expected no further children and, in addition, 10 per cent of all women or their husbands had had an operation which prevented conception. Thus for 71 per cent of the total sample, the number of children expected altogether was the same as the number of children they actually had at the time of the investigation. Of those who expected more children, almost all (95 per cent) mentioned a specific number (or in a very small minority of cases a range of numbers) for their final family size but only 13 per cent of those who gave a numerical answer were 'very sure' that they would have this number of children. Thus almost all women who expected more children mentioned a number but less than one in eight were prepared to be absolutely definite about that number. However, almost all those who were less than 'very sure' about the number of children they would have were prepared to give a 'largest' and a 'smallest' value to the number of children they expected to have altogether. The answers of only a very few women could not be allocated to a numerical category. The proportions of women who expressed their answers in this form in both 1967 and 1972 were very similar.

From the answers to these questions a variety of measures of 'expected family size' was possible for a number of women. In the initial stages of the investigation, in 1967, the absence of any reliable information on the validity of the different measures of expected family size meant that the choice from the range of measures was somewhat arbitrary. In the absence of a single measure, the only guiding principle that seemed reasonable was to produce extreme upper and lower limits within which actual family size was likely to fall; thus acknowledging that for a minority of women their views on the number of children they might have were, to say the least, imprecise.

A minimum and a maximum number of children were devised for both 1967 and 1972. In 1967, the *minimum* expected number of children was considered to be:

a. for those women who expected more children or were uncertain, the number they expected to have if they were 'very sure' of the number or the *smallest* number they expected to have if they gave a range of numbers and if they were 'not too sure', or only 'fairly sure', of the number they expected.

b. for those who 'probably' or 'definitely' expected no more children the number of children they had still living at the time of the interview, with the addition of one for all those who were then pregnant.

Women who said that it was impossible or difficult for them to have any more children were assumed to have completed their families and were assigned a value equivalent to their current family size.

The *maximum* number of children took into account the answers to the question which asked women what size of family they expected if their circumstances were to change. In 1967, 71 per cent of all fecund women included in the study said that no change of circumstances would lead them to change their mind about the number of children they expected altogether; in 1972, the proportion for *all* women was 54 per cent. The remainder did speculate about the kind of circumstances which would alter their expectations but the particular circumstances were unlikely to be realised in practice.

As before:

a. for those who expected more children or were uncertain, the number considered was that expected if they were 'very sure' of the number, but was the *largest* number they expected if a range of numbers was given and if they were 'not sure', or only 'fairly sure', of the number they expected.

b. for those who 'probably' or 'definitely' expected no more children, they were asked about the number they might have 'if anything would make you change your mind and have more children'. If 'nothing' would bring about a change of mind, the number included in the estimate was that of the number of children they had still living at the time of the interview. Otherwise it was taken to be the largest number they would have if they changed their minds. Women who said it was medically difficult for them to have a child were also asked the number they would have if circumstances changed and this number was included as the *maximum* number.

Similar measures were constructed from the 1972 data. The continuous use of minimum and maximum estimates would have doubled the amount of analysis required for the study. Therefore, for working purposes an estimate of the '*most likely*' expected family size was devised. In 1967, this was defined as the number given by the respondent if she was 'very sure' that this was the number expected. Otherwise it was taken as the arithmetic mean of the minimum and maximum derived.

It was apparent when the measures were devised, and it became more obvious later, that the estimate of the maximum number of children expected was too high, including as it did the increase in the number of children expected as the result of such unlikely events as the improvement in family finance brought about by winning the football pools; it produced an estimate of a mean number of children of 2·9 for women married between 1965 and the 1967 interview. The combination of this maximum with the minimum estimates in producing the 'most likely' estimates for 1967 probably resulted in an overestimate of mean family size. The source of this overestimate was, as pointed out earlier, the inclusion in the maximum estimate of the size of family which might result if the circumstances of the women interviewed were to change. In most cases the change in circumstances which was said to be likely to bring about such an increase in family size was too improbable to occur in all the cases where it was mentioned.

Therefore, in 1972, a revised estimate of the '*most likely*' number of children expected was compiled based on the number given if the respondent expected more children and was 'very sure' that this was the number but taking the mean of the smallest and largest numbers expected, for the remainder expecting more children. Those who did not expect any more children were assigned the number of children they had at the time of the interview. In neither case was an estimate included for the number of children she might have if her circumstances changed. To provide a basis for comparison, a similar estimate was compiled retrospectively for the 1967 data.

Where the mean of maximum and minimum estimates resulted in fractional values (e.g. a minimum of two children and a maximum of three would result in a 'most likely' estimate of 2·5 children), the individual is represented in the tabular data in the group equivalent to the appropriate whole number but the actual value was included for the computation of derived statistics. There seemed very little point in the grouping of these fractional values separately since they were very few in number—for example, 6 per cent of the values on the 'most likely' number of children expected in 1972. However, strictly speaking, the descriptions in the stub of such tables as 3·1 should read '1 but less than 2', '2 but less than 3' etc., with the proviso that the majority of individuals are represented by the first whole number.

Before going on to discuss in detail the distributions of the numbers of children expected which resulted from these definitions, the implications of using as a filter question 'Do you expect to have any (more) children? Would you say definitely yes, probably yes, you're uncertain, probably no or definitely no?' are worth considering. On the answers to this question depend whether the women were asked 'How many . . . ?' or whether their current family size was assumed to be their ultimate family size.

Omitting those women who thought that they had fecundity problems in 1967, 55 per cent of the re-interviewed women had said, in 1967, that they expected more children, 14 per cent were uncertain and 30 per cent said not. By 1972, 61 per cent of these couples had had at least one more child and this proportion decreased almost systematically from the 82 per cent of those who had originally said 'Definitely yes' to the 57 per cent who were uncertain to the 38 per cent who had said 'Definitely no'. In very general terms, about three-quarters of the women who had said they expected more children had had at least one within five years of the original interview while almost two-thirds of those who expected no further children had had none by 1972. Those uncertain in 1967 were almost equally likely to have had more children as not, particularly if they had already had two or three children in 1967. The majority of those with one child in 1967 had gone on to have at least one more even if they had originally said that they expected no more. It is possible that in those cases where women had said they expected no further children after having one, they were influenced by some difficulty in achieving a successful first pregnancy. As it happened, those difficulties were not repeated and they found themselves pregnant again. This interpretation is consistent with the variations in the lengths of intervals between successive births and is discussed further in Chapter 4.

Thus, it would seem that the use of the filter question before asking how many children were expected altogether may have reduced the effectiveness of the techniques in providing a surrogate measure of final family size, particularly in the case of those with one child at the time of the original enquiry.

Table 3.1 *Women married 1960–67*
Percentage distribution of number and mean number of children expected in 1967 (analysed by number of living children in 1967)

Number of children expected in 1967	*All numbers of children*		*Number of living children in 1967*									
			0		*1*		*2*		*3*		*4 or more*	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Maximum number												
0	18	1	18	5	—	—	—	—	—	—	—	
1	59	4	10	3	48	10	—	—	—	—	—	
2	483	35	142	36	211	43	130	34	—	—	—	
3	475	34	132	33	156	32	144	38	43	43	—	
4 or more	331	24	88	22	73	15	98	26	57	56	15	
No answer	18	1	7	2	6	1	5	1	1	1	—	
Mean number	2·8		2·7		2·6		2·9		3·7		4·7	
Minimum number												
0	89	6	89	22	—	—	—	—	—	—	—	
1	318	23	121	30	197	40	—	—	—	—	—	
2	733	53	162	41	252	51	319	85	—	—	—	
3	182	13	16	4	33	7	49	13	84	83	—	
4 or more	54	4	4	1	10	2	8	2	17	17	15	
No answer	8	1	5	1	2	*	1	*	—	—	—	
Mean number	1·9		1·3		1·7		2·2		3·2		4·5	
Most likely number (1967 definition)												
0	18	1	18	5	—	—	—	—	—	—	—	
1	87	6	37	9	49	10	—	—	—	—	—	
2	582	42	197	50	254	52	131	35	—	—	—	
3	544	39	124	31	161	33	216	57	43	43	—	
4 or more	135	10	13	3	25	5	25	7	57	56	15	
No answer	18	1	8	2	5	1	5	1	1	1	—	
Mean number	2·5		2·2		2·3		2·7		3·6		4·5	
Most likely number (1972 definition)												
0	81	6	81	20	—	—	—	—	—	—	—	
1	113	8	21	5	92	19	—	—	—	—	—	
2	726	53	211	53	275	56	240	64	—	—	—	
3	306	22	59	15	82	17	97	26	68	67	—	
4 or more	114	8	17	4	27	5	27	7	29	29	14	
No answer	44	3	8	2	18	4	13	3	4	4	1	
Mean number	2·2		1·8		2·1		2·4		3·3		4·3	
Base	1,384		397		494		377		101		15	

N.B. Unless otherwise stated, 'most likely number of children expected' refers to the 1972 definition (for both 1967 and 1972 data) of this concept throughout these tables.

Table 3.1 illustrates the differences in the four estimates of expected family size derived from the four measures in 1967. At that time, the women included in the recall study expected a mean number of children which varied from 2·8 as a maximum to 1·9 as a minimum. The former figure derived from women opting for a spread of values between two and four or more children. As a minimum, most women expected two children, about a quarter expected one and relatively few expected three or more. The difference between the mean most likely number expected on the 1967 and 1972 definitions (2·5 and 2·2 respectively) reflects the omission from the 1972 definition of additional children the women thought they might have if their circumstances were to change.

The comparison between the 1967 and 1972 'most likely' numbers of children expected, using the 1972 definition, forms the basis for the greater part of the discussion in this section. However, it needs to be appreciated that the coincidence or otherwise of the estimates on expected family size is a function of the definitions as selected and compiled, as well as a reflection of the changes in women's views. Although some time has been spent in investigating the major effects of the different definitions a more detailed investigation of the variations resulting from the adoption of different measures is a necessary study to be undertaken in the future.

Meanwhile, given the definitions adopted, the main questions considered in this chapter are:

a. the extent to which women had, by 1972, already exceeded the number of children they expected altogether in 1967

b. whether there were any particular characteristics of this group which would lead to their being easily identifiable at the initial investigation, and hence whether additional information which would take account of their original understatement could be built into any estimation process

c. the extent to which those who had not exceeded their 1967 expectations had, nevertheless, changed the number of children they expected by 1972

d. whether there was some point during the marriage when the expected number of children became sufficiently stable to be used as a surrogate for final family size and whether this was so for all women or for particular groups

e. whether infecundity, wasted pregnancies and family planning usage appeared to account for changes in the number of children expected to any important extent and

f. what the women expected in 1972 their final family size would be.

Two further points need to be made before discussing the substance of the data. First, the recall sample was confined to those who were relatively recently married in 1967 and, therefore, any discussion of stability or otherwise in the number of children expected is not applicable to all married women but only to those married less than eight years in 1967—that is, the relatively younger women and those in the early years of building their families.

Secondly, conclusions about the sources of, and reasons for, the stability or otherwise of the number of children expected were obtained by inference. The women themselves were not confronted in 1972 with their 1967 statements and asked to account for either the congruence or discrepancy in their views. There is a great deal to be said for doing this since that part of the change which was brought about by conscious intention could be more adequately described and its possible sources evaluated. The main reason for not so doing in the present study was the lack of information, in 1967, about the most appropriate measure of expected family size to use and, therefore, what might be regarded, on one definition, as a change in expectations would, on another, indicate stability to the women concerned, particularly as differences were usually only of the order of one child. The resulting confusion could not be easily handled within an interview situation designed to investigate many other aspects of family building. One result of the follow-up investigation was to clarify the terms in which such a discussion could be carried out. It is to be hoped that an investigation into the women's reactions to apparent changes in their stated views can be pursued.

3.3 The number of children expected in 1967 and the number of living children in 1972

First of all, to what extent had the family size expectations expressed by the women in 1967 been exceeded by 1972? And how many women, expecting no more children in 1972, had the number they expected in 1967? The data are presented in absolute numbers in table 3.2 for all four measures of 'number of children expected altogether'. They suggest that between 7 per cent and 27 per cent (on the maximum and minimum measures, respectively) of the interviewed women already had more children by 1972 than they had expected altogether in 1967. The comparable figure for the most likely number expected, using the 1972 definition, was 16 per cent; 14 per cent of the women had had *one* more and 2 per cent had *two or more* children greater than the number they had expected altogether in 1967. Thirty-one per cent of the women, based on this definition of

Table 3.2 *Women married 1960–67*
Percentage distribution of number and mean number of living children in 1972 (analysed by number of children expected in 1967)

Number of women

Number of children living in 1972	*All numbers*	*Number of children expected in 1967*					
		0	*1*	*2*	*3*	*4 or more*	*No answer*
		%	%	%	%	%	%
(1) Maximum number of children							
0	126	*12*	4	47	32	26	5
1	258	3	*38*	107	70	38	2
2	653	—	14	*281*	238	115	5
3	250	1	3	42	*111*	89	4
4 or more	93	—	—	5	23	*63*	2
No answer	4	2	—	1	1	—	—
Total	1,384	18	59	483	475	331	18
(2) Minimum number of children							
0	126	*52*	36	37	—	1	—
1	258	23	*129*	89	13	1	3
2	653	10	133	*464*	35	9	2
3	250	2	19	122	*96*	9	2
4 or more	93	—	1	19	38	*34*	1
No answer	4	2	—	2	—	—	—
Total	1,384	89	318	733	182	54	8
(3) Most likely number (1967 definition)							
0	126	*12*	21	58	28	3	4
1	258	3	*46*	136	62	7	4
2	653	—	16	*333*	282	17	5
3	250	1	4	48	*141*	54	2
4 or more	93	—	—	6	30	*54*	3
No answer	4	2	—	1	1	—	—
Total	1,384	18	87	582	544	135	18
(4) Most likely number (1972 definition)							
0	126	*46*	4	57	11	4	4
1	258	22	*57*	138	34	4	3
2	653	9	43	*437*	112	31	21
3	250	2	9	82	*116*	32	9
4 or more	93	—	—	10	33	*43*	7
No answer	4	2	—	2	—	—	—
Total	1,384	81	113	726	306	114	44

the number of children expected, still had fewer children than they had expected in 1967. Thus by 1972, between 35 per cent and 55 per cent of the women, on the maximum and minimum definitions respectively, had had the number of children they expected in 1967. The proportion on the revised 'most likely' definition was 49 per cent and this increased to 59 per cent for those who, in 1972, expected no further children; some 22 per cent of this latter group (13 per cent of all women interviewed) in fact had fewer children than they had expected in 1967 and by 1972 said they expected no further children.

Table 3.3 *Women married 1960–67*

Percentage distribution of number of living children in 1972 compared with number expected in 1967

	Total sample	*Those who in 1972 said they expected*[1] *no more children*
		%
1972 number of living children equalled 1967 number expected	49	59
The number of living children exceeded expectations by one	14	13
The number of living children exceeded expectations by two or more	2	3
The number of living children was one below expectations	20	17
The number of living children was two or more below expectations	11	5
No answer/unclassifiable	3	3
Base	1,384	838

[1] Excluding those couples who had had an operation or injury making it impossible to have children (see table 3.6).

Thus, based on the 1972 definition of the 'most likely' number of children expected, 222 of the 1,384 interviewed women had, by 1972, one or more children in excess of the number they had expected in 1967. Not surprisingly, but with one exception, proportionately more of the women who in 1967 actually had the number of children they expected had, by 1972, exceeded those expectations. Half the women who in 1967 had one child and expected one altogether had, by 1972, two or more children. Similarly, 41 per cent of those who were childless and expected to remain so, and 31 per cent of those who had and expected three children in 1967, had exceeded their expectations by 1972. Only those who had and expected two in 1967 were marginally less likely than some other groups to have had, in 1972, more children than they had expected in 1967 although in absolute terms, this was the largest single group (58 in all) among the 222 women whose numbers of children in 1972 were greater than their 1967 expectations. At the other extreme, very few of those who had 0–1 children in 1967 but at that time expected three had exceeded those expectations by 1972.

Perhaps the most distinguishing characteristic of the women who by 1972 already had more children than they had expected in 1967 was their view of their own or their husbands' fecundity early on in marriage. When asked, in 1967, whether they thought that there were any medical reasons for their (or their husbands') having difficulty in producing living children in the future, more of those who gave answers which suggested a degree of impairment had, by 1972, a greater number of children than they had initially expected. As table 3.4 illustrates, 53 per cent of those who in 1967 thought that they were in some way sub-fecund[2] had more children by 1972 than they had expected five years earlier; a relatively high proportion had two or more in excess. The comparable proportion for those who were classified as probably sterile on the basis of answers to the question on medical difficulties associated with child-bearing was 29 per cent. These proportions compare with 17 per cent for the total sample and 12 per cent for those who, in 1967, were unaware of any impairment to their fecundity.

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[2] See Appendix C for details of the definition.

Table 3.4 *Women married 1960–67*
Percentage distribution of number of living children in 1972 compared with number expected in 1967 (analysed by future fecundity in 1967)

	All groups	*Future fecundity in 1967*			
		Probably sterile	*Sub-fecund*	*Fecund with past difficulties*	*Fecund*
	%	%	%	%	%
1972 number living children equalled 1967 expected number	49	70	45	51	49
1972 number living children exceeded expectations by one	14	24	36	8	11
1972 number living children exceeded expectations by two or more	3	5	17	2	1
1972 number living children was one below expectations	20	—	—	27	23
1972 living children was two or more below expectations	11	—	2	8	12
No answer/unclassifiable	3	2	—	5	4
Base	1,384	63	97	111	1,112

Since the result of any real impairment to fecundity is likely to be a short-fall rather than excess of children compared with the number expected, it seems probable that the women's views of their fecundity had some effect, if not on the techniques of family planning used, at least on the way they used contraception with the result that they had more children than they initially expected. Unfortunately, the size of the sample was not sufficiently large to allow for an investigation of the inter-relation between the women's views of their fecundity in 1967 and their subsequent use of family planning. Therefore table 3.5 presents the data on family planning usage in the interval 1967–72 for all degrees of fecundity together. Two main measures of family planning were drawn up: the number of family planning techniques the couple had used in the period 1967–72 and whether, for each technique, it was always used or whether the couple 'took chances'. As the definition in Appendix C explains, the term 'technique' includes both the use of an individual method by most couples and the use of two methods either simultaneously or as alternatives over a period by a small minority of couples. It needs to be appreciated that neither of these summaries indicate when, either within or prior to the period 1967–72, family planning was first used.

However, despite the inelegance of the analysis, there is the suggestion that an excess of children over expectations was associated with a larger number of changes in family planning technique—presumably as each failed—and with the less consistent use of at least some of those techniques.

It is also of interest to note that couples who say, after five or more years of marriage, that they have never used family planning are much less likely than the using groups to have more children than they expected. Many more, proportionately, have fewer children than they had expected to have five years previously.

Table 3.5 *Women married 1960–67*

Percentage distribution of number of living children in 1972 compared with number expected in 1967 (analysed by (i) the number of changes in family planning technique 1967–72 and (ii) whether a method was always used or 'took chances')

	Total sample	*Never used family planning*	*Number of family planning techniques used 1967–72*				*Whether always used method or 'took chances'*						
							Did not change technique 1967–72 and			*Changed technique 1967–72* and			
			1	*2*	*3*	*4 or more*	(*a*)	(*b*)	(*c*)	(*d*)	(*e*)	(*f*)	(*g*)
	%	%	%	%	%	%	%	%	%	%	%	%	%
1972 living children equalled 1967 expected number	49	53	53	47	46	48	58	39	(51)	52	40	34	45
1972 living children exceeds expectations by one	14	2	11	15	18	21	10	11	(13)	12	23	17	22
1972 living children exceeds expectations by two or more	3	2	2	2	4	4	2	4	(5)	2	5	2	—
1972 living children is one below expectations	20	10	19	23	21	15	18	24	(16)	20	21	34	27
1972 living children is two or more below expectations	11	30	11	9	7	8	10	16	(11)	9	9	12	4
No answer/unclassifiable	3	3	4	3	4	4	3	5	(3)	4	2	2	3
Base	1,384	60	555	486	221	52	385	99	37	421	171	59	109

(a) Always used the method
(b) Sometimes 'took chances'
(c) Insufficient information for classification
(d) Always used the methods employed at the time
(e) Always used some methods, 'took chanccs' with others
(f) 'Took chances' with all techniques
(g) Insufficient information for classification.

It would appear, therefore, that women who have a particular but probably mistaken, view of their own or their husband's infecundity early on in marriage are more likely, after five years, to have exceeded the number of children they had expected. The process is probably influenced by the couple's use of contraception. Any measures which attempted to use expected family size as a surrogate for final family size would need to incorporate these aspects of family building.

However, although women who thought they had impaired infecundity were relatively more likely to have exceeded their expectations, in absolute terms the largest single group were still those who thought they were fecund in 1967. That is, of the 222 women who had exceeded their 1967 expectations, 141 were unaware of any involuntary limitation to their fecundity in 1967.

In 1972, 41 of those couples who had exceeded their 1967 expectations had undergone a sterilising operation or (in an insignificant number of cases) had suffered an injury which prevented future child-bearing. This was a higher proportion (18 per cent) than for the interviewed women as a whole (10 per cent). Whether the greater number of children they had had by 1972 was the result of accident or intention cannot be gauged authoritatively: the evidence on fecundity and family planning suggests accident. However, their future child-bearing, after 1972, was certainly curtailed.

Twenty-four (11 per cent) of the women had obviously changed their minds about the number of children they expected to have altogether since they expected to have more children after the 1972 interview even though at that time they already had more children than they had expected in 1967. A further 20 were uncertain as to whether they expected more children after 1972. The remaining 133 (60 per cent) for whom information was available said that they expected no further children. Again, whether their current excess was from choice or by chance cannot be resolved from this analysis.

Table 3.6 *Women married 1960–67*

Percentage distribution of the number of living children in 1972 compared with the number expected in 1967 for those who had had an operation or injury making further child-bearing impossible

	Total sample	*Those for whom future child-bearing impossible in 1972*
	%	%
1972 number of living children equalled 1967 number expected	49	55
The number of living children exceeded expectations by one	14	23
The number of living children exceeded expectations by two or more	3	5
The number of living children was one below expectations	20	8
The number of living children was two or more below expectations	11	6
No answer or unclassified	3	3
Base	1,384	145

However, for the remainder of the sample, those whose family size was equal to or fewer than the number they expected in 1967, any changes would be due to choice in a general sense except in the very small number of cases where children had died in the interim. It is with the overall changes in expectations that the next section is concerned.

3.4 The stability of expectations

Of the 222 women who had more children in 1972 than they had expected in 1967, 155 had increased their overall expectations between 1967 and 1972 by one child and 66 had done so by two or more. Of the remaining 1,114 women who had equal or fewer children than they had expected in 1967, 68 per cent expected the same number of children on both occasions, 10 per cent had increased their expectations in 1972—almost all by one child—while 16 per cent had reduced the number of children they expected by one child and 6 per cent had reduced it by two. Thus, where the choice remained open five years further on in marriage, a majority of women expected the same number of children and of the remainder most expected fewer children at the second interview. However, this finding may well be particular to the younger group of married women that were included in this investigation and to the circumstances of the years 1967 to 1972: that is, changes in expectations are probably not independent of external events and tend to reflect as well as to contribute to prevailing norms. This calls into question, of course, any idea that couples have a plan of family unaffected by changing circumstances either within the family or outside it. More likely, couples have a very loosely designed plan which tends to be adjusted in response to the couples' growing experience of children, particularly when the initial question on the number of children expected was asked early on in marriage, and in response to the prevailing economic and social climate which for the years 1967–72 was increasingly reflecting feelings of economic pessimism and world over-population.

However, the fact that family building patterns may be ill-defined at marriage does not deny the possibility that at some stage in the marriage continuum, expectations may be sufficiently stable far enough ahead of the event to be used as a substitute for final family size. Also, since some women's expectations do remain stable, questions are raised about the differing circumstances and views, if any, of those who expected the same number of children on the two occasions and those who did not. These are the questions pursued in this and the following section.

Table 3.7 *Women married 1960–67*

Number of children expected in 1972 compared with number expected in 1967

Number of children expected in 1972	*All numbers in 1967*		*Number of children expected in 1967*											
			0		*1*		*2*		*3*		*4*		*No answer*	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Maximum number														
0	28	2	*6*	*(33)*	2	3	9	2	5	1	2	1	4	(22)
1	91	7	5	(28)	*29*	*49*	31	6	18	4	7	2	1	(6)
2	487	35	3	(17)	10	17	*255*	*53*	149	31	66	20	4	(22)
3	483	35	1	(6)	17	29	133	28	*217*	*46*	109	33	6	(33)
4 or more	276	20	—	—	1	2	50	10	80	17	*142*	*43*	3	(17)
No answer	19	1	3	(17)	—	—	5	1	6	1	5	1	—	—
Total number of women	1,384	100	18	100	59	100	483	100	475	100	331	100	18	100
Minimum number														
0	57	4	*28*	*31*	11	3	14	2	3	2	1	2	—	—
1	298	21	33	37	143	45	98	13	17	9	5	9	2	(25)
2	682	49	24	27	142	25	*477*	*62*	30	17	6	11	3	(37)
3	247	18	2	2	20	6	121	17	*92*	*51*	11	20	1	(13)
4 or more	97	7	—	—	2	1	22	3	40	22	*31*	*57*	2	(25)
No answer	3	*	2	2	—	—	1	*	—	—	—	—	—	—
Total number of women	1,384	100	89	100	318	100	733	100	182	100	54	100	8	100
Most likely (1972 definition) number														
0	68	5	*33*	*41*	4	4	21	3	5	2	4	4	1	(2)
1	136	10	17	21	*45*	*40*	56	8	14	5	2	2	2	(5)
2	673	49	20	25	45	40	*492*	*68*	81	26	15	13	20	(45)
3	362	26	7	9	17	15	136	19	*154*	*50*	37	32	10	(25)
4 or more	138	10	1	1	2	2	18	2	52	17	*55*	*48*	10	(23)
No answer	7	1	3	4	—	—	3	*	—	—	—	—	1	(2)
Total number of women	1,384	100	81	100	113	100	726	100	306	100	114	100	44	100

Table 3.8 *Women married 1960–67*

Percentage distribution of number of children expected in 1972 compared with number of children expected in 1967 (analysed by (i) date of marriage, (ii) number of living children in 1967)

Number of children expected in 1967 and in 1972	*All women*	*Date of marriage*				*Number of living children in 1967*			
		1960–61	*1962–63*	*1964–65*	*1966–67*	*0*	*1*	*2*	*3 or more*
	%	%	%	%	%	%	%	%	%
(a) Maximum number									
Same number expected	44	48	49	40	39	36	45	51	47
1972 exceeded 1967 by one	17	19	14	19	15	15	17	19	19
1972 exceeded 1967 by two	6	7	6	7	4	5	8	5	9
1972 was below 1967 by one	20	18	18	21	26	26	20	16	16
1972 was below 1967 by two	10	7	11	11	15	17	8	8	8
Unclassified	2	1	2	1	1	2	1	1	1
(b) Minimum number									
Same number expected	55	61	57	49	54	45	56	65	55
1972 exceeded 1967 by one	24	25	26	26	17	22	26	23	28
1972 exceeded 1967 by two	6	5	6	7	4	8	5	4	6
1972 was below 1967 by one	11	7	8	12	21	19	10	5	3
1972 was below 1967 by two	3	3	3	5	3	5	3	2	7
Unclassified	1	—	1	1	*	1	*	*	—
(c) Most likely number (1972 definition)									
Same number expected	55	58	59	48	54	51	53	61	55
1972 exceeded 1967 by one	19	21	18	18	16	14	19	21	26
1972 exceeded 1967 by two	5	6	5	8	1	8	4	4	6
1972 was below 1967 by one	13	10	9	17	17	14	17	8	7
1972 was below 1967 by two	5	3	4	6	8	10	3	2	2
Unclassified	4	3	5	3	3	3	4	3	4
Base	1,384	365	387	404	228	397	494	377	116

The extent to which there have been changes in the number of children expected between 1967 and 1972 for the same group of women is illustrated in tables 3.7 and 3.8. The three measures of maximum, minimum and most likely (1972 definition) expected numbers of children are given.

When maximum numbers are compared 44 per cent of women married between 1960 and 1967 expected the same number of children in 1972 as they did in 1967. The proportion rose to 55 per cent for both the minimum and most likely measures. On the maximum measure, 30 per cent of the women had revised their expectations downward in 1972, compared with 14 per cent and 18 per cent on the other measures, respectively. Twenty-three per cent, 30 per cent and 24 per cent, respectively, had revised their expectations upward. Considering the 'most likely' measure, the agreement of expected numbers varied from 68 per cent for those women who *expected* two children in 1967 to 40–41 per cent for those who, in 1967, expected one or no child.

Agreement was narrowly defined as the same unit number occurring in both 1967 and 1972. In the small number of cases where the number was fractional, it was classified according to whole number unit and the fraction ignored. Thus, to simplify the analysis (without any great bias in interpretation) a most likely expected number of 2·5 children in 1972 was considered to be the same as two children in 1967, though there was no more reason for defining agreement in this way than for equating 2·5 children in 1972 with three children in 1967.

It may be that such a precise definition of agreement is too narrow and that, bearing in mind the variety of expected number definitions possible and the problems in measurement such as the allocation of fractional values, it would be more realistic and more faithful to the quality of the answers given by the women interviewed to allow a margin of measurement error of one child. In that case, only large changes in expected numbers of children would become apparent for use as bases for the assumptions on which fertility projections are made. If such a wider definition of the agreement between expected numbers of children were used, 87 per cent of the women interviewed in 1972 expected the same number of children, plus or minus one, as they did in 1967 on the 'most likely' 1972 definition.

However, reverting to the narrower definition of the most likely number of children expected, analysis by the number of living children the women had in 1967 suggests that women who had two children were least likely to have revised their expectations; while those who were then without children were most likely to have done so by 1972. Of those without children in 1967, approximately the same proportion had increased as decreased the numbers of children they expected. Compared with those who had two or more children at the time of the original study, proportionately more of those with no or one child had revised their estimates downward.

Similarly, analysis by date of marriage (table 3.8) illustrates that the reductions in the number of children expected were most marked for women married most recently—that is, of those married for less than two years at the first interview, 25 per cent had evidently overestimated the number of children they expected and had since revised their expectations so that 17 per cent expected one fewer child than they had done in 1967 and 8 per cent two fewer. Only after marriages had been in existence for some four years was the tendency to overestimate the number of children expected much reduced.

These analyses suggest that expected numbers of children were more likely to be stable for women who have been married for longer than four years and that, proportionately, more of those who had two children initially, maintained their stated expectation over the subsequent five years. This is further illustrated in table 3.9 which summarises the number of children expected in 1967 and in 1972 in relation to the actual number of children living in those two years. However, because of the detail, the number of women in the sub-groups are small and inferences made from the data need to be treated circumspectly.

Table 3.9 *Women married 1960–67*

Number of children expected in 1972 and in 1967 (analysed by number of living children in 1972 and in 1967)

Most likely (1972 definition) expected number in 1967	*0*		*1*				*2*				
Number of living children in 1967	*0*		*0*		*1*		*0 or 1*			*2*	
Number of living children in 1972	*0*	*1 or more*	*0*	*1 or more*	*1*	*2 or more*	*0–1*	*2*	*3 or more*	*2*	*3 or more*
	%	%	%	%	%	%	%	%	%	%	%
Most likely (1972 definition) expected number in 1972											
0	36	—	4	—	—	—	18	—	—	—	—
1	6	11	—	7	38	—	56	—	—	—	—
2	5	15	—	7	8	30	108	213	—	165	—
3	1	6	—	2	—	15	11	36	26	15	46
4 or more	—	1	—	1	—	1	—	—	5	1	12
No answer	1	—	—	—	—	—	1	1	1	1	—
Total number of women	46	33	4	17	46	46	194	250	32	182	58

Most likely (1972 definition) expected in 1967	3								
Number of living children in 1967	*0 or 1*				*2*			*3*	
Number of living children in 1972	*0–1*	*2*	*3*	*4 or more*	*2*	*3*	*4 or more*	*3*	*4 or more*
Most likely (1972 definition) expected number in 1972									
0	3	—	—	—	—	—	—	—	—
1	14	—	—	—	—	—	—	—	—
2	17	42	—	—	21	—	—	—	—
3	10	28	16	—	15	42	—	43	—
4 or more	1	3	3	3	1	9	9	2	21
No answer	—	1	—	—	—	—	—	1	—
Total number of women	45	74	19	3	37	51	9	46	21

Most likely (1972 definition) expected number in 1967	*4*							
Number of living children in 1967	*0 or 1*			*2 or 3*			*4*	
Number of living children in 1972	*0 or 1*	*2*	*3*	*2 or 3*	*4*	*5 or more*	*4*	*5 or more*
Most likely (1972 definition) expected number in 1972								
0	2	—	—	—	—	—	—	—
1	2	—	—	—	—	—	—	—
2	2	6	—	6	—	—	—	—
3	1	13	6	16	—	—	—	—
4 or more	—	4	2	5	20	6	5	4
No answer	—	—	—	—	1	—	1	—
Total number of women	7	23	8	27	21	6	6	4

In general, stability in expected numbers of children in the two years 1967 and 1972 was greatest for women who, in 1967, expected to have two children altogether, almost regardless of the number of children they had at that time, and for women who expected three children if they already had two or three children. Expected numbers of children were least stable for women who expected three children and had had only one or no child in 1967 and for those who said they expected none or one child. In the latter case, over half the women had revised their estimates upward, in the former just over half said in 1972 that they expected fewer children than they had done in 1967. The change is even more marked among women who said that they expected to have four children but with relatively little experience of child-bearing and rearing in 1967. More than three-quarters of these women (though the numbers were small) had, in 1972, revised downward their estimates of the number of children they expected to have.

Summarising the extent to which expected family size remained stable for the two years 1967 and 1972, the proportions of women whose 'most likely' expected number of children remained the same are given below (from table 3.9).

69 per cent of women in 1967 had two children and expected two

67 per cent of women in 1967 had none or one child and expected two

61 per cent of women who in 1967 had two or three children and expected three

41 per cent of women who in 1967 expected no children

40 per cent of women in 1967 expected one child

38 per cent of women who in 1967 had none or one child and expected three.

The distinction between the groups with higher proportions of stable expectation and those with lower seems to be, first between those who expected two children and those who expected another number and secondly between those who had experience of children and those who had not. Women expecting three children in 1967 but with experience of only one child or none at all were least likely to have maintained this expectation by 1972. Fifty-four per cent of this group had in fact revised their expectations downward since 1967.

3.5 Variations in changes in the number of children expected

The approach to the investigation of variations in the changes in the number of children women expected to have was solely by inference, in the absence of any direct questioning of the women as to why they thought they had changed their views. The descriptions then tell us which particular groups, if any, were more likely to have changed and, by inference, the possible reasons why these changes have occurred. To clarify the range of possible reasons which might account for the changed views, it is proposed to discuss the subject according to the following typology: that women re-appraise the number of children they expect for:

a. mechanistic reasons: they become aware of some degree of infecundity or they are affected by wasted pregnancies or continued experience of their use of family planning brings about a re-assessment of the number of children they are likely to have

b. reasons of family building: either the sexes of the children they actually have or the timing of their births lead women to change their views about the number they expect altogether

c. reasons associated with the couples themselves: their level of education, socio-economic group, religion and family organisation appear to be associated with changes in their expectation

d. reasons associated with the individual woman's reactions to ideas reflecting the values which the women have expressed about motherhood and children.

The data for the whole sample have been analysed and not separated into those who actually had a greater number by 1972 than they had expected altogether in 1967 and those who had not, though reference is sometimes made to this subdivision when it is appropriate to do so. Although two-thirds of the women who had revised their expectations upward between 1967 and 1972 actually had a greater number of children in 1972 than their 1967 expectations, the reasons for their doing so were probably no different from those who in 1972 had yet to achieve the number they expected in 1967.

At the beginning of the previous section, it was pointed out that 68 per cent of the women who had not exceeded the number of children they had expected in 1967 still had the same expectations in 1972. Further analysis of this group, illustrated in table 3.10, indicates that where the woman actually had the number she expected in 1967, 14 per cent had revised their expectations upward while 3–4 per cent of those who had not yet reached the number they expected in 1967 had done the same. In addition, 17 per cent of women who already had one more child than they had expected in 1967, expected two more by 1972. For whatever reason, these groups had obviously changed their minds. By definition, all those with a greater number of children in 1972 than they had expected in 1967 had revised their expectations upward.

Table 3.10 *Women married 1960–67*

Percentage distributions of changes in the number of children expected in 1967 and in 1972 (analysed by a comparison of the number of living children in 1972 with the number expected in 1967)

Number of children expected in 1967 and in 1972	*All*	*Number of children expected in 1967 and number of living children in 1972*					
		Same number	*1972 living children exceeded 1967 expectations*		*1972 living children below 1967 expectations*		*Unclassified*
			by one	*by two or more*	*by one*	*by two or more*	
	%	%	%	%	%	%	%
Same number expected	55	86	—	—	45	32	—
1972 exceeded 1967 by one	19	12	82	—	4	3	—
1972 exceeded 1967 by two or more	5	2	17	(100)	*	—	—
1972 was below 1967 by one	13	—	—	—	50	26	—
1972 was below 1967 by two or more	5	1	*	—	1	39	—
Unclassified	4	*	—	—	*	—	(100)
Base	1,384	685	188	34	283	146	48

Of those with fewer children, more than half had revised their estimates downward, particularly if, in 1972, they had had two (or more) children fewer than they had expected in 1967. This suggests that the number of children a woman expects to have adjusts fairly rapidly to the number of children she actually has. Inevitably, having more children increases the number she expects to have, but having fewer children after the passage of some four and a half to five more years of marriage also seems to result in a revision of her expectations but in a downward direction. This contrasts with views about ideal family size which appeared to react less sensitively to individual behaviour. Whereas expected family size which contains as a large component the number of children already living, changed as additional children were born and also as time passed without the birth of additional children, views about ideal family size appeared to be less affected by what happened to individual couples and to mirror to a greater extent what is acceptable to a community at different points in time.

However, in the remainder of this section, it is the reasons for the downward revisions in the number of children expected as well as the reasons associated with the increase in the number expected which are investigated.

Certainly a growing awareness of infecundity was associated with a revision downward in the number of children expected. As table 3.11 shows, proportionately more women who in 1972 thought that their future fecundity was impaired expected fewer children in 1972 than they had done in 1967 (34 per cent compared with 16 per cent of those unaware of any medical limitation to their fecundity). By 1972, all these women had been married for at least four-and-a-half years and their views about their own fecundity were probably more realistic. This contrasts with the situation in 1967, discussed in the previous

Table 3.11 *Women married 1960–67*
Percentage distribution of changes in the number of children expected in 1967 and in 1972 (analysed by future fecundity in 1967 and in 1972)

Number of children expected in 1967 and in 1972	*All groups*	*Future fecundity in 1972*				*Future fecundity in 1967*		
		Sterile due to operation/ injury	*Impaired fecundity*	*Fecund but with past difficulties*	*Fecund*	*Impaired fecundity*	*Fecund but with past difficulties*	*Fecund*
	%	%	%	%	%	%	%	%
Same number expected	55	54	49	42	56	43	59	56
1972 exceeded 1967 by one	19	24	11	20	18	27	12	18
1972 exceeded 1967 by two	5	5	3	16	5	27	5	3
1972 was below 1967 by one	13	7	19	13	13	1	17	14
1972 was below 1967 by two	5	8	15	5	3	1	3	5
Unclassified	4	3	3	5	4	1	5	4
Base	1,384	144	78	102	1,047	161	111	1,112

Table 3.12 *Women married 1960–67*
Percentage distribution of changes in the number of children expected in 1967 and in 1972 (analysed by (i) the number of changes in family planning techniques 1967–72 and (ii) whether a method was always used or the couple 'took chances')

Number of children expected in 1967 and in 1972	*All groups*	*Never used family planning*	*Number of family planning techniques used 1967–72*				*Whether always used or 'took chances'*						
							Used one technique only and			*Used more than one technique 1967–72 and*			
			1	*2*	*3*	*4 or more*	*always used*	*took chances*	*un-classified*	*(a)*	*(b)*	*(c)*	*un-classified*
	%	%	%	%	%	%	%	%	%	%	%	%	%
Same numbers expected	55	50	61	52	48	54	64	55 54	(62)	54	43	56	46
1972 exceeded 1967 by one	19	10	13	22	25	25	13	15 15	(13)	20	29	20	26
1972 exceeded 1967 by two	5	6	6	5	6	8	4	8 8	(11)	4	8	7	5
1972 was below 1967 by one	13	11	11	16	14	8	11	10 10	(11)	15	13	9	19
1972 was below 1967 by two	5	17	5	3	4	2	5	7 7	—	3	4	7	1
Unclassified	4	5	4	3	4	4	3	5 5	(3)	4	2	2	3
Base	1,384	60	555	486	221	52	385	99	37	421	171	59	109

(a) Always used all methods
(b) Always used some techniques, took chances with others
(c) Took chances with all techniques.

section, when the women who then thought that their fecundity was impaired were more likely, in 1972, to have had more children than they had expected in 1967.

Changes of family planning technique in the five years 1967–72 were also associated with changes in the number of children expected (table 3.12). More frequent changes of technique, particularly if the couple 'took chances' with some of the techniques, were related to an increase in the proportion of couples who had increased the number of children they expected.

Table 3.13 *Women married 1960–67*

Percentage distribution of changes in the number of children expected in 1967 and in 1972 (analysed by number and sex order of children in 1972)

Number of children expected in 1967 and in 1972	*All groups*	*No living children*	*Number and order of children by sex in 1972*									
			One child		*Two children in this order*				*More than two: first two in this order*			
			boy	*girl*	*boy boy*	*boy girl*	*girl girl*	*girl boy*	*boy boy*	*boy girl*	*girl girl*	*girl boy*
	%	%	%	%	%	%	%	%	%	%	%	%
Same number expected	55	54	55	44	66	63	63	72	35	39	46	34
1972 exceeded 1967 by one	19	7	12	13	11	16	16	12	38	39	31	38
1972 exceeded 1967 by two	5	5	4	5	3	3	3	3	10	12	10	14
1972 was below 1967 by one	13	9	22	31	15	11	11	10	10	5	5	7
1972 was below 1967 by two	5	20	6	6	2	3	3	2	1	1	1	5
Unclassified	4	5	2	2	4	3	4	2	6	4	6	2
Base	1,384	128	129	128	169	178	136	169	102	77	80	85

Table 3.14 *Women married 1960–67*

Those with two or more children in 1972

Percentage distribution of changes in the number of children expected in 1967 and in 1972 (analysed by number of living children in 1967 and by number and sex of children in 1972)

Number of children expected in 1967 and in 1972	*Number of living children in 1967* *0*		*1*		*2*		*0–1*		*2*		*3 or more*	
	Two children in 1972 of which first was:						*Three or more children in 1972 of which first was:*					
	boy	*girl*	*boy*	*girl*	*boy*	*girl*	*boy*	*girl*	*boy*	*girl*	*boy*	*girl*
	%	%	%	%	%	%	%	%	%	%	%	%
Same number expected	48	69	63	63	80	80	28	(17)	34	37	56	61
1972 exceeded 1967	28	21	21	23	7	7	62	(66)	55	56	37	30
1972 was below 1967	23	10	16	14	12	13	10	(17)	11	7	7	9
Total replying	64	58	148	134	123	103	50	29	65	73	54	56

Number of children expected in 1967 and in 1972	*Number of living children in 1967* *0*		*1*		*2*		*0–1*		*2*		*3 or more*	
	Two children in 1972 of:						*Three or more children in 1972 of which first two were of:*					
	same sex	*different sex*	*same sex*	*different sex*	*same sex*	*different sex*	*same sex*	*different sex*	*same sex*	*different sex*	*same sex*	*different sex*
	%	%	%	%	%	%	%	%	%	%	%	%
Same number expected	54	61	63	63	79	81	(23)	(25)	45	26	53	(65)
1972 exceeded 1967	31	20	20	24	7	8	(63)	(65)	46	65	40	(25)
1972 was below 1967	15	19	17	14	14	11	(15)	(10)	9	9	6	(10)
Total replying	52	70	136	146	104	122	40	40	69	69	62	48

N.B. Unclassifiable answers have been excluded from the table.

Whether the careless use of family planning led to the birth of additional children which in turn led to an increase in the total number of children expected or whether a desire for more children resulted in a less careful use of family planning is not clear from this analysis but the more frequent changes in technique together with 'taking chances' suggest that the former explanation might be more plausible. It may well be that it was the birth of additional, unexpected children that led to the change in family planning technique. On the other hand proportionately more of those who had never used family planning after some five years of marriage expected fewer children than in 1967.

Data on wasted pregnancies—the final 'mechanistic' reason considered—seemed to suggest that they have little connection with the stability or otherwise of the number of children expected. A marginally greater proportion of those who had experienced a pregnancy which ended involuntarily had revised their expectations downward, but the difference between this and the group without any wasted pregnancies was small.

Table 3.15 *Women married 1960–67*
Percentage distribution of changes in the number of children expected in 1967 and in 1972 (analysed by the timing of first births by 1972)

Number of children expected in 1967 and in 1972	*Timing of first births*						
	All groups	*One living child born*		*Two living children, first born*		*Three living children, first born*	
		within 18 months of marriage	*more than 18 months after marriage*	*within 18 months of marriage*	*more than 18 months after marriage*	*within 18 months of marriage*	*more than 18 months after marriage*
	%	%	%	%	%	%	%
Same number expected	55	56	46	65	72	42	46
1972 exceeded 1967 by one	19	13	13	13	10	38	28
1972 exceeded 1967 by two	5	—	6	2	3	6	11
1972 was below 1967 by one	13	21	28	13	12	10	9
1972 was below 1967 by two	5	8	5	3	2	1	2
Unclassified	4	3	2	5	1	3	4
Base	1,384	77	185	290	184	155	92

N.B. Those with no living children, four or more living children and those who could not be allocated according to the timing of the births of their living children are omitted from this table.

The extent to which changes in the number of children expected were associated with the way families were built up is illustrated in tables 3.13–3.15. More specifically, the number and sex of the children, together with birth order and data on how long after marriage the children were born were related to these changes. It is obvious that the number of children women had in 1972 was the most important item affecting their view: more of those with none or one child had revised their estimates downward, more of those with three had increased the number they expected to have. Within each parity, however, changes in expectation appeared to be only marginally related to the sex order of the child(ren). As table 3.13 shows, among women with two children slightly more, proportionately, of those with two boys had revised their expectations downward; revisions upward were perhaps more likely where the second child was a girl, while 72 per cent of those with a girl followed by a boy expected the same number of children in 1972 as in 1967. This last figure compares with 55 per cent for the total sample. If the analysis is confined to women with two or more children as illustrated in table 3.14, and women with two children in 1972 are considered, the group most likely to have increased the number of children they expected consisted of women who were childless in 1967 but had since had two children of the same sex (from the previous table, this probably applies to a greater degree if the two children were both girls). Presumably, women without children in 1967 envisaged having two of different sexes and when this did not occur in all cases, proportionately more of those with children of the same sex increased the number of children they expected. Where women had had two children in both 1967 and 1972, the sexes of the children were almost irrelevant in accounting for changes in expectations: perhaps slightly more of those with two children of the same sex had revised their estimates downward; that is, in most cases they decided to stop at two children of the same sex whereas previously they had expected a further child. It is, however, noticeable from the first part of table 3.14, that where women were childless in 1967 but had had two children by 1972 (regardless of the number expected altogether), proportionately more (23 per cent) were likely to have readjusted downward the number of children they expected if the first child was a boy than if it was a girl (10 per cent). Whether bearing a son represented the achievement of some kind of social or personal goal or whether women found there were more difficulties associated with bearing and rearing first sons compared with first daughters, the effect when the first child was a boy was that a relatively higher proportion of women reduced the number of children they expected altogether.

Where women had only one child in 1972 (table 3.13), reductions in the number of children expected—perhaps an acceptance of infecundity—were more likely if the child was female. Where women had three or more children in 1972, increases in the number of children expected were least likely where the first two children were girls, adjustments downward were more frequent where the second child was a boy. From table 3.14, women with two children in 1967 and three (or more) in 1972 were more likely to have increased the number of children they expected if the first two were of different sexes (65 per cent). It is possible that they assumed that the two children they had in 1967 comprised their completed family but the unexpected birth of a further child inevitably brought about an increase in the total expected, whereas more of those with two children of the same sex in 1967 originally expected further children.

It would seem that changes in the number of children expected were more a function of the stage of marriage at which the woman found herself and of the number of children she had. The sexes of her children played some part in affecting her views of the numbers she expected but mainly in the particular cases of women who were childless at the initial interview and of women who had two children of different sexes at the initial interview and who had had further children. In the former case, the lack of experience was more likely to lead to a reduction in the number of children expected, particularly if the first child was a boy but to an increase in the numbers expected if the two children who had been born by 1967 were of different sexes. The adjustment in the second case was due to a possibly unwanted birth.

Does the timing of the births lead to a readjustment of views on the number of children expected? Do women who find that they experience relatively long intervals between births either from choice or because of infecundity reduce the number of children they expect to have? The data in table 3.15 suggest that the timing of births is again of lesser importance than the actual number of children born in accounting for the changes in the numbers of children expected. Seventy-two per cent of women with two living children, the first born after 18 months of marriage, expected the same number of children in 1972 as they had done in 1967; this compares with 55 per cent for the total sample and 65 per cent of women with two children, the first of which was born within 18 months of marriage. Thus, those with two children, particularly where the first was born

Table 3.16 *Women married 1960–67*
Percentage distribution of changes in the number of children expected in 1967 and in 1972 (analysed by (i) husband's socio-economic group in 1972 and (ii) changes in husband's socio-economic group 1967 and 1972)

Number of children expected in 1967 and in 1972	*All groups*	*Husband's socio-economic group 1972*				*Changes in husband's socio-economic group 1967 and 1972*										
						1967 managerial		*1967 non-manual*			*1967 skilled manual*			*1967 other manual*		
		Mana-gerial	*Non-manual*	*Skilled manual*	*Other manual*	*1972 mana-gerial*	*1972 all other*	*1972 Non-manual*	*1972 mana-gerial*	*1972 manual*	*1972 skilled*	*1972 mana-gerial/non-manual*	*1972 other manual*	*1972 other manual*	*1972 skilled*	*1972 mana-gerial/non-manual*
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Same number expected	55	55	56	55	53	52	43	56	56	(86)	55	64	53	54	50	(53)
1972 exceeded 1967 by one	19	16	18	20	18	18	25	17	18	(9)	19	11	15	19	28	(21)
1972 exceeded 1967 by two	7	7	4	5	7	5	4	5	8	—	5	5	10	6	7	(8)
1972 was below 1967 by one	13	13	13	12	14	14	14	13	10	—	13	12	15	15	9	(18)
1972 was below 1967 by two	5	5	6	4	4	6	6	5	6	—	5	5	7	3	2	—
Unclassified	4	4	4	4	3	5	8	4	3	(5)	3	2	2	3	4	—
Base	1,384	312	299	556	215	169	51	200	72	21	437	91	62	133	100	38

more than 18 months after marriage had stable expectations. Among those with three children, there is the suggestion that slightly more of those who experienced a longer first birth interval maintained their 1967 expectations but the differences were small. The reverse was the case for those with one child; proportionately more of those with a longer first interval had reduced the number of children they expected, but again the differences in the timing patterns illustrated in table 3.15 accounted in only a small measure for changed expectations. Rather, as the discussion in Chapter 4 will suggest, expectations of particular numbers of children appear to influence the timing of births.

The relationship between the socio-economic measures and the stability of the number of children expected is illustrated in tables 3.16–3.19.

Table 3.17 *Women married 1960–67*

Percentage distribution of changes in the number of children expected in 1967 and in 1972 (analysed by religion)

Number of children expected in 1967 and in 1972	*All groups*	*Religion*					
		Husband and wife: Christian not Catholic	*Wife: Catholic Husband: other Christian*	*Husband: Catholic Wife: other Christian*	*Husband and wife: Catholic*	*Husband and wife: non-Christian*	*Other combinations*
	%	%	%	%	%	%	%
Same number expected	55	56	54	40	49	59	57
1972 exceeded 1967 by one	19	18	13	27	20	18	19
1972 exceeded 1967 by two	5	5	3	7	5	4	10
1972 was below 1967 by one	13	13	19	13	15	9	10
1972 was below 1967 by two	5	4	6	7	9	7	—
Unclassified	4	4	6	7	2	2	3
Base	1,384	1,002	69	62	86	98	67

Table 3.18 *Women married 1960–67*

Percentage distribution of changes in expected number of children 1967 and 1972 (analysed by age completed full-time education)

Number of children expected in 1967 and in 1972	*All groups*	*Age completed full-time education*					
		Husband 15 years		*Husband 16–19 years*		*Husband 20 or over*	
		Wife 15 years	*Wife over 15 years*	*Wife 15 years*	*Wife over 15 years*	*Wife up to 19 years*	*Wife 20 or over*
	%	%	%	%	%	%	%
Same number expected	55	53	60	53	61	52	(55)
1972 exceeded 1967 by one	19	21	13	20	15	22	(8)
1972 exceeded 1967 by two	5	7	6	2	3	2	(11)
1972 was below 1967 by one	13	11	15	15	13	16	(16)
1972 was below 1967 by two	5	5	2	5	6	4	(8)
Unclassified	4	4	5	6	1	4	(3)
Base	1,384	680	186	162	231	50	38

Table 3.19 *Women married 1960–67*
Percentage distribution of changes in the number of children expected in 1967 and in 1972 (analysed by a measure of family organisation)

Number of children expected in 1967 and in 1972	*All groups*	*Number tasks performed jointly*			
		Five or six	*Four*	*Three*	*Two or fewer*
	%	%	%	%	%
Same number expected	55	(51)	54	55	55
1972 exceeded 1967 by one	19	(15)	12	19	20
1972 exceeded 1967 by two	5	(4)	6	6	5
1972 was below 1967 by one	13	(19)	16	13	11
1972 was below 1967 by two	5	(6)	5	4	5
Unclassified	4	(4)	6	3	3
Base	1,384	47	173	590	574

The husband's socio-economic group in 1972 seems little related to variations in the number of children expected between 1967 and 1972 (table 3.16). Some relationship between the dependent variable and *changes* in the husband's socio-economic group between 1967 and 1972 is evident in that a slightly higher proportion of those with husbands changing from unskilled to skilled manual occupations and from managerial to other occupations increased the number of children expected while a decrease in numbers of children expected was marginally more likely for those with husbands changing from skilled to other manual occupations. However, the differences were not large and do not lend sufficient support to any theory accounting for variations in or adjustments of family size in terms of the changing occupations of husbands. Only among husbands changing from skilled manual to non-manual or managerial occupations did a noticeably higher proportion maintain in 1972 the expectations they had had in 1967 and a lower proportion, compared with others in skilled occupations in 1967, exceed those expectations.

The data on religion (table 3.17) support the suggestion in the GAF study[1] that Catholic women tended to overestimate, initially, the number of children they expected to have. The present data show that proportionately more of the couples where both husband and wife were Catholic and those where the wife was Catholic had reduced the number of children they expected in 1972 compared with 1967. However, where the husband was Catholic and the wife was not, a greater proportion had increased their expectations, mainly as the result of the birth of additional children. This reflects the use of less efficient methods of family planning by these couples. Stability of expectations was marginally more likely among couples claiming to have no religious affiliation or no Christian affiliation.

Relating the data on educational level collected in 1967 to changes in expectations (table 3.18) we find that proportionately more of those women who had finished their education after 15 years of age expected the same number of children in 1972 as in 1967. Revisions upwards in the number of children expected were marginally associated with women who had completed their education earlier. Again, as an explanation of changes in expectations, the differences between couples reflected by their levels of education were of lesser importance than the 'mechanistic' reasons.

Two further variables have been included for illustrative purposes since they may suggest other reasons for the variations in the number of children expected. In 1967, a measure of family organisation was attempted to see whether, in a large-scale study, families could be classified along a continuum which at one extreme categorised families as ones in which the husband and wife had interchangeable roles with respect to the organisation of the household and at the other extreme categorised families in which the husband and wife had distinct functions and spheres of influence about which they rarely consulted each other. The theory[1] suggested that the latter type of household tended to result in larger families than the former. The processes whereby this happened were not clear but it was suggested that the lack of communication between husband and wife as evidenced by their separate spheres of influence was transferred into the whole area of sexual relations and family building.

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[1] P K Whelpton, A A Campbell and J E Patterson. *Fertility and Family Planning in the United States.* Princeton University Press.

In 1967, the measure devised was not satisfactory and the analysis using the measure was abandoned. In 1972, a simplified measure was devised using the original data but merely classifying households into those in which a number of household tasks such as carrying out repairs, inviting visitors and so on was done by both husband and wife and those in which these tasks were done by one *or* the other.[2] The number of tasks performed jointly was the variable used in analysing the changes in number of children expected (table 3.19). The differences are certainly small but there does appear to be a trend associating increases in the number of children expected between 1967 and 1972 with a decrease in the number of tasks performed jointly. Thus, proportionately more of the women who see themselves and their husbands as having distinct roles in the household were marginally more likely to have increased the number of children they expected to have while more of those women whose households are organised jointly with their husbands had reduced their expectations. It suggests, at least, that the effect of the organisation of the household in terms of the roles adopted by husband and wife on family size may warrant further investigation using a more sophisticated description of household organisation.

Finally, the attitude questions used in the 1967 study were repeated in 1972. When analysed, they yielded similar dimensions as in 1967, attitudes which could be said to describe:

a. antipathy to children

b. a fear of over-crowding and over-population

c. the importance of material conditions to children

d. a general partiality to the idea of motherhood and children
 and

e. a view that children need siblings and training in sharing.[2]

Table 3.20 illustrates the relationship between these measures and variations in the number of children expected. Again, differences were very small due possibly to the difficulties of measurement as well as to small substantive differences. Nevertheless, the trends do suggest that those who could be classified as being more partial to the idea of motherhood and children and those who expressed the view that children have the greatest need for siblings were more likely to have revised upward the number of children they expect to have as did those who were least concerned with over-crowding and over-population and with the supposed material requirements of children.

The data on family organisation and attitudes are suggestive rather than definitive, but they indicate that a wider approach incorporating ideas of family organisation and the reactions of individual women to the benefits and limitations, as they perceive them, of having children would more comprehensively account for the total variation in family size.

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[1] E Bott. *Family Network*.

[2] Details are to be found in Appendix C.

Table 3.20 *Women married 1960–67*

Percentage distribution of changes in the number of children expected in 1967 and in 1972 (analysed by five attitude measures in 1972: (i) antipathy to children, (ii) fear of over-crowding, (iii) importance of material conditions to children, (iv) partiality to children, (v) need for brothers and sisters and training in sharing)

Number of children expected in 1967 and in 1972	*All groups*	*Antipathy to children*					*Fear of over-crowding*					*Importance of material conditions*				
		Least anti-pathy	*Some anti-pathy*	*Anti-pathy*	*More anti-pathy*	*Most anti-pathy*	*Least concern with over-crowding*	*Some concern*	*Concern with over-crowding*	*More concern with over-crowding*	*Most concern with over-crowding*	*Con-sidered of least impor-tance*	*Con-sidered of some impor-tance*	*Con-sidered impor-tant*	*Con-sidered more impor-tant*	*Con-sidered of great impor-tance*
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Same number expected	55	54	54	55	56	56	50	60	46	51	62	53	52	56	65	58
1972 exceeded 1967 by one	19	19	18	18	19	19	21	21	19	21	15	21	21	19	16	16
1972 exceeded 1967 by two	5	5	5	7	6	6	7	4	7	6	4	6	6	4	7	5
1972 was below 1967 by one	13	15	14	10	10	11	12	12	17	13	12	11	15	15	14	13
1972 was below 1967 by two	5	4	5	6	3	5	6	1	6	4	4	4	4	5	7	5
Unclassified	4	3	5	4	6	3	4	2	6	5	3	5	4	3	2	4
Base	1,384	511	196	188	126	363	347	141	180	223	493	384	195	219	218	368

Number of children expected in 1967 and in 1972	*Partiality to children*					*Need for siblings and training to share*				
	Least partial	*Some partiality*	*Partial*	*More partial*	*Most partial*	*Consider least need*	*Some need*	*Need for siblings etc.*	*Greater need*	*Greatest need*
	%	%	%	%	%	%	%	%	%	%
Same number expected	60	66	56	54	47	59	60	59	54	44
1972 exceeded 1967 by one	14	13	17	18	25	14	14	17	22	25
1972 exceeded 1967 by two	4	3	7	3	8	4	5	4	5	10
1972 was below 1967 by one	14	9	13	15	12	15	14	13	13	10
1972 was below 1967 by two	5	5	3	5	5	5	4	4	3	7
Unclassified	3	3	3	5	4	4	3	4	4	4
Base	353	149	199	227	456	335	223	272	235	319

3.6 Expected number of children in 1972

By 1972, all the women included in this investigation had been married for at least four-and-a-half years. Most had, by then, some knowledge of their fecundity and some experience of child bearing and rearing. On the evidence of the preceding discussion on the stability of number of children expected, such a time lag is likely to result in a more realistic assessment of final family size. Therefore, how many children did these women expect to have altogether in 1972? The evidence is, of course, based on the responding sample of women with its deficiencies.

Table 3.21 *Women married 1960–67*

Percentage distribution and mean number of children expected altogether in 1972 (analysed by date of marriage)

Most likely (1972 definition) number of children expected in 1972	*All dates*	*Date of marriage*			
		1960–61	*1962–63*	*1964–65*	*1966–67*
	%	%	%	%	%
0	5	5	4	5	6
1	10	10	9	12	9
2	49	39	50	52	55
3	26	29	26	23	26
4 or more	10	16	10	8	3
No answer	1	*	1	—	1
Base	1,384	365	387	404	228
Mean number of children expected	2·3	2·5	2·4	2·2	2·2

Table 3.22 *Women married 1960–67*

Percentage distribution and mean number of children expected altogether in 1967 (analysed by date of marriage)

Most likely (1972 definition) number of children expected in 1967	*All dates*	*Date of marriage*			
		1960–61	*1962–63*	*1964–65*	*1966–67*
	%	%	%	%	%
0	6	5	6	8	3
1	8	9	8	9	4
2	53	46	54	55	56
3	22	27	20	17	26
4 or more	8	10	7	8	7
No answer	3	3	5	3	2
Base	1,384	365	387	404	228
Mean number of children expected	2·2	2·3	2·2	2·1	2·3

Table 3.21 indicates that the responding women married between 1960 and 1967, expected, on average, 2·3 children using the most likely (1972) measure. This compares with an average of 2·2 children in 1967 using the most likely (1972) measure. Differences according to date of marriage were very small, but the earlier marriage cohorts had, on average, increased the number of children they expected, while the 1966–67 cohort had scaled down their expectations. In 1972, the mean number of children expected declined from the earlier to the later marriage cohorts, as it did in 1967 (apart from the 1966–67 marriage cohort in 1967). A similar decline for the more recent marriage cohorts was exhibited in 1972 if the maximum and minimum numbers of children expected were used as measures (tables not shown). The mean maximum number of children expected declined from 2·8 for those married in 1960–61 to 2·6 for those married in 1964 or later while the mean minimum number of children expected declined from 2·3 to

1·8 for those married in 1966 or 1967. The small decline from cohort to cohort in the mean number of children expected in 1972 reflected, as in the previous study, a decreasing proportion of couples expecting a family of four or more children and an increased emphasis on two-child families.

Table 3.23 *Women married 1955–62*
Women married 1960–67
Percentage distribution and mean number of children expected for women of similar marriage durations in 1967 and in 1972

Most likely (1972 definition) number of children expected	*All durations*		*Duration of marriage*							
	in 1967	*in 1972*	*11–12 years*		*9–10 years*		*7–8 years*		*5–6 years*	
			1967	*1972*	*1967*	*1972*	*1967*	*1972*	*1967*	*1972*
	%	%	%	%	%	%	%	%	%	%
0	8	5	8	5	7	4	8	5	8	6
1	11	10	11	10	10	9	12	12	10	9
2	41	49	39	39	39	50	39	52	46	55
3	23	26	20	29	23	26	25	23	23	26
4 or more	13	10	17	16	16	10	12	8	8	3
No answer	5	1	6	*	5	1	5	—	5	1
Base	2,420	1,384	604	365	593	387	596	404	627	228
Mean number of children expected	2·3	2·3	2·4	2·5	2·4	2·4	2·3	2·2	2·1	2·2

Compared with women of similar marriage durations married five years earlier, the present sample differed little on the mean number of children expected. At all durations, fewer women interviewed in 1972 expected to remain childless and fewer expected to have families of four or more children. At durations of 11–12 years of marriage, the change was to three-child families if those interviewed in 1972 are compared with those interviewed in 1967 while at durations of 7–10 years, an increased proportion expected two children. Proportionately more of those married 5–6 years in 1972 expected two and three children compared with women married the same length of time in 1967 but the differences were too small and the possible biases in the sample too large to make much of the resulting decimal increase in the mean number of children expected.

Table 3.24 *Women married 1955–62*
Women married 1960–67
Those with two living children
Percentage distribution and mean number of children expected in 1967 and in 1972 for women of similar marriage durations and with two living children in 1967 and in 1972, respectively

Most likely number of children expected (1967 definition for women married 1955–62) (1972 definition for women 1960–67)	*Women married 1955–62 with two living children in 1967*	*Women married 1960–67 with two living children in 1972*
	%	%
2	47	79
3	46	19
4 or more	5	2
No answer/unclassified	*	*
Base	1,006	653
Mean number of children	2·6	2·3

In table 3.24, the number of children expected by women with two children and married between five and twelve years on the two occasions were compared.

Unfortunately, the comparison is between the most likely number of children on the 1967 definition for those married between five and twelve years in 1967 and on the 1972 definition for those married the same length of time in 1972. As was pointed out earlier, the 1967 definition resulted in a higher estimate of the number of children than the 1972 definition. Nevertheless, the differences in the distributions of the number of children expected are sufficiently striking to be worth presenting. Women married between five and twelve years in 1967, with two children expected, on average, 2·6 children while similar women in 1972 expected 2·3. In 1967, half the women expected to go on to have a third or fourth child while in 1972, just over one-fifth expected to do so. In 1972 after at least five years of marriage, 79 per cent of women with two children expected to have two children. In 1967, the percentage was 47 per cent. The decline in the proportion of women expecting three or more children is unequivocal.

3.7 Variations in the number of children expected altogether in 1972

As in the 1967 study, differences in expectations between some of the sub-groups in the population are shown for descriptive purposes and as suggestive of 'reasons' for those differences. Again, the variations considered have been of two kinds: tables 3.25 and 3.26 illustrate differences related to fecundity in 1972 and family planning usage, the remaining tables (3.27–3.29) are concerned with what are usually considered the socio-economic explanatory variables.

The incidence of wasted pregnancies seems to be little related to the number of children expected. In fact, those who had experienced such a pregnancy expected, on average, 2·4 children compared with 2·3 for the remaining women. An expectation of four or more children was more frequent among those experiencing a wasted pregnancy and it seems likely that, experiencing more pregnancies they run a greater risk of one not resulting in a live birth, rather than wasted pregnancies producing a reduction in the number of children expected.

Infecundity and family planning were, to a greater or lesser extent, more related to the number of children expected. Apart from those who had experienced a sterilising operation or injury, all those who described themselves in 1972 as being relatively infecund for one reason or another expected fewer children than those who were not aware of any disabilities. Forty per cent of those with some kind of fecundity impairment whether of the reproductive system or because of other conditions aggravated by pregnancy (and 47 per cent of those who said they had difficulty in conceiving) compared with 2 per cent of those described as fecund expected no children.

Table 3.25 *Women married 1960–67*

Percentage distribution and mean number of children expected altogether in 1972 (analysed by the couple's future fecundity in 1972)

Most likely (1972 definition) number of children expected in 1972	*All women*	*Future fecundity 1972*			
		Sterile due to operation/injury	*Impaired fecundity*	*Fecund but with past difficulties*	*Fecund*
	%	%	%	%	%
0	5	6	40	—	2
1	10	7	22	12	9
2	49	32	24	61	52
3	26	33	9	23	27
4 or more	10	22	4	4	9
No answer	1	—	1	—	1
Base	1,384	144	78	102	1,047
Mean number of children	2·3	2·7	1·2	2·3	2·4

Those who had had an operation or an injury which had a sterilising effect (or whose husbands had had such an operation or injury) expected, on average, a larger number of children than all other groups: 2·7 children compared with 2·4 children for the fecund. A considerable proportion of women in this group expected (i.e. had) three or more children (55 per cent compared with 36 per cent of the fecund) while 13 per cent expected none or one child. Although in many cases where women had three or more children it would be difficult to distinguish between such operations carried out for medical reasons and those carried out solely for contraceptive purposes, the fact that such a large proportion of couples in this group had four or more children compared with those described as fecund suggests its use as a contraceptive method.

Table 3.26 *Women married 1960–67*
Percentage distribution and mean number of children expected in 1972 (analysed by (i) main method of family planning, (ii) number of changes in family planning techniques 1967–72, (iii) whether method was always used or the couple 'took chances'

Most likely (1972 definition) number of children expected in 1972	*Total sample*	*Method of family planning used or last used in 1972*								*Number of family planning techniques 1967–72*			
		Never used family planning	*Safe period*	*Withdrawal*	*Sheath*	*Loop*	*Cap with spermicide*	*Jellies, pessaries*	*Pill*	*One*	*Two*	*Three*	*4 or more*
	%	%	%	%	%	%	%	%	%	%	%	%	%
0	5	32	1	4	4	4	5	(3)	3	7	1	2	—
1	10	23	11	11	10	3	8	(9)	10	13	8	3	6
2	49	32	44	47	51	52	59	(50)	49	49	50	54	38
3	26	10	23	23	27	27	20	(28)	29	23	31	28	37
4 or more	10	2	19	15	7	13	9	(9)	9	9	10	13	19
No answer	1	2	1	*	*	—	—	—	1	1	—	*	—
Base	1,384	60	91	225	512	92	66	32	426	555	486	221	52
Mean number	2·3	1·9	2·6	2·5	2·3	2·4	2·3	(2·3)	2·4	2·2	2·5	2·5	2·7

Most likely (1972 definition) number of children expected in 1972	*Total sample*	*Never used family planning*	*Whether always used method or 'took chances'*						
			Did not change technique 1967–72 and			*Changed technique 1967–72 and*			
			(*a*)	(*b*)	(*c*)	(*d*)	(*e*)	(*f*)	(*g*)
	%	%	%	%	%	%	%	%	%
0	5	32	6	5	(3)	1	1	—	4
1	10	23	13	10	(16)	8	5	7	5
2	49	32	50	44	(51)	54	47	37	47
3	26	10	23	27	(19)	27	33	44	32
4 or more	10	2	8	12	(11)	10	13	12	12
No answer	1	2	1	1	—	—	1	—	—
Base	1,384	60	385	99	37	421	171	59	109
Mean number	2·3	1·9	2·2	2·4	(2·2)	2·4	2·6	2·7	2·5

(a) Always used the method
(b) Sometimes 'took chances'
(c) Insufficient information
(d) Always used the methods employed at the time
(e) Always used some methods ,'took chances' with others
(f) 'Took chances' with all techniques
(g) Insufficient information for classification.

The relationship between the number of children expected and family planning was as might be expected, with some exceptions. For example, those who had never used any of the listed methods of family planning did not expect larger than average numbers of children, but rather smaller and a disproportionately high number expected no children. This suggests that the non-use of contra-

Table 3.27 *Women married 1960–67*

Percentage distribution and mean number of children expected altogether in 1972 (analysed by (i) the husband's socio-economic group in 1972 and (ii) changes in socio-economic group 1967 and 1972)

Most likely (1972 definition) expected number of children 1972	*All groups*	*Husband's socio-economic group 1972*				*Changes in husband's socio-economic group in 1967 and in 1972*										
						1967 managerial		*1967 non-manual*			*1967 skilled manual*			*1967 other manual*		
		Mana-gerial	*Non-manual*	*Skilled manual*	*Other manual*	*1972 mana-gerial*	*1972 all other*	*1972 non-manual*	*1972 mana-gerial*	*1972 manual*	*1972 skilled*	*1972 mana-gerial/ non-manual*	*1972 other manual*	*1972 other manual*	*1972 skilled*	*1972 mana-gerial/ non-manual*
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
0	5	5	6	4	6	7	4	7	—	(10)	4	6	5	6	6	—
1	10	5	10	12	12	4	8	12	6	(10)	12	7	13	13	9	(5)
2	49	53	55	47	37	47	43	55	58	(48)	49	63	42	36	40	(58)
3	26	27	23	25	31	27	39	22	26	(24)	25	22	27	31	26	(24)
4 or more	10	10	6	10	13	14	6	5	10	(10)	9	3	13	14	17	(13)
No answer	1	*	*	1	*	1	—	1	—	—	1	—	—	1	2	—
Base	1,384	312	299	556	215	169	51	200	72	21	437	91	62	133	100	38
Mean number	2·3	2·4	2·2	2·3	2·4	2·4	2·4	2·1	2·5	2·2	2·3	2·2	2·4	2·4	2·5	2·5

ception is associated with a degree of sub-fecundity or possibly unstated abstinence from coitus.

Expecting four or more children is more frequent among those using the safe period, withdrawal or the loop as their present or last (if they are currently pregnant or wanting to become pregnant) method of family planning. From this kind of analysis, it is not clear whether larger numbers of children were born as a result of using these methods or whether the methods were adopted after the births of higher order children. One suspects the former in the case of current users of the safe period and withdrawal and the latter in the case of those fitted with the loop. Similarly, the expectation of four or more children is greater for those who more frequently changed their family planning technique between 1967 and 1972 and for those who occasionally 'took chances' and did not use a method of family planning. Thus it is the manner in which family planning is used as well as the individual methods employed which is associated with the number of children expected.

Table 3.28 *Women married 1960–67*
Percentage distribution and mean number of children expected altogether in 1972 (analysed by religion)

Most likely (1972 definition) expected number of children 1972	*All groups*	*Religion*					
		Husband and wife Christian not Catholic	*Wife: Catholic Husband: other Christian*	*Husband: Catholic Wife: other Christian*	*Husband: and wife Catholic*	*Husband and wife non-Christian*	*Other combinations*
	%	%	%	%	%	%	%
0	5	5	1	7	9	5	6
1	10	9	20	7	5	13	12
2	49	51	42	42	31	47	49
3	26	25	22	34	34	29	24
4 or more	10	9	14	11	21	6	8
No answer	1	1	—	—	—	—	2
Base	1,384	1,002	69	62	86	98	67
Mean number	2·3	2·3	2·4	2·4	2·7	2·2	2·2

Table 3.29 *Women married 1960–67*
Percentage distribution and mean number of children expected altogether in 1972 (analysed by age completed full-time education)

Most likely (1972 definition) expected number of children 1972	*All groups*	*Age completed full-time education*					
		Husband 15 years[1]		*Husband 16–19 years*		*Husband 20 or over*	
		Wife 15 years[1]	*Wife over 15 years*	*Wife 15 years*[1]	*Wife over 15 years*	*Wife up to 19 years*[1]	*Wife 20 or more*
	%	%	%	%	%	%	%
0	5	4	4	8	5	8	(3)
1	10	11	10	9	6	2	(5)
2	49	44	57	51	59	34	(50)
3	26	28	22	27	21	38	(32)
4 or more	10	13	6	5	8	18	(11)
No answer	1	1	1	1	*	—	—
Base	1,384	680	186	162	231	50	38
Mean number	2·3	2·3	2·2	2·2	2·2	2·6	2·5

[1] Includes a small number completing their education below 15 years.

Variations in the number of children expected in relation to the husband's socio-economic group are illustrated in table 3.27. The relationship with a measure of socio-economic mobility is also given. This suggests a greater likelihood of four or more children among those who were in managerial occupations in the two particular years and among those who were in unskilled/semi-skilled occupations in 1967 and remained so in 1972 or had had a skilled occupation in 1967 and some other kind of manual occupation in 1972. However, some of these latter changes in socio-economic status may be more apparent than real because of the problems of classifying occupations consistently over an interval of five years when the information is based on a wife's description of her husband's occupation. As in 1967, the smallest number of children, on average, is expected by those in non-manual (but not managerial) occupations, particularly among those who were still in the same type of occupation in 1972. Those who were subsequently classified as being in managerial occupations expected, on average, a larger number of children. A family of two children was most frequently expected by the skilled manual in 1967 who were in managerial/non-manual occupations in 1972 and among the non-manual in 1967 who were in managerial occupations in 1972. However, differences between the groups were, on the whole, small though they give some support to earlier studies which showed relatively larger families among those in managerial and non-skilled manual occupations and smaller among the remaining non-manual occupations. The present study also suggests that differences in occupations earlier in marriage—in 1967—better 'explained' differences in expectations in 1972 than did occupational differences in 1972.

With some exceptions, differences between religious groups (table 3.28) and those with varying lengths of education (table 3.29) were also not large. Catholic couples were most likely to expect three or four children but this was not necessarily so where the wife was Catholic and the husband not. Four-child families were also more likely if the husband had completed his education at 20 years of age or over, particularly if his wife had completed hers below 20 years of age, and they were also marginally more likely if both husband and wife had finished their full-time education at 15. This may well be a repeat of the finding on differences in expectations with respect to the husband's occupation.

Analyses were also carried out using as the explanatory variables the attitude measures mentioned earlier. The illustrative tables have not been included in this section but will appear in a more detailed study of attitudes in relation to family size. However, the data have some relevance to variations in the number of children expected and some comment seems appropriate here.

The concepts reflecting ideas of over-crowding and over-population, of generally being in favour of motherhood and children and that children need siblings and training in sharing, as they were measured in both 1967 and 1972, showed a relationship with the number of children expected.

Those groups who, in 1967, were most concerned about over-crowding and over-population expected, in 1972, an average of 2·2 children. This average increased as the stated concern with over-population decreased. Similarly, when measured again in 1972, those most concerned with over-crowding and over-population expected, in 1972, an average of 2·1 children and this increased to 2·6 children for those least concerned with over-crowding and over-population.

In the same way, those most in favour of the idea of motherhood and of children as a good and natural state in 1967, expected 2·6 children on average, while those least in favour expected an average of 2·1 children. When measured again in 1972, those most in favour expected an average of 2·7 children, those least in favour 2·1 children.

The comparable mean numbers of children expected in relation to the idea of a child's need for siblings were, for the 1967 measures, 2·7 for those most to 2·2 for those least in favour and for 1972, 2·8 to 2·0 for the same groups. Again, as in 1967, the women's individual reactions to the ideas they had expressed about the values they associated with having children appeared to be directly related to the number of children they expected to have.

3.8 **Summary**

The relationship between the number of children women expected in 1967 and in 1972 is perhaps best summarised by the following table:

1972 actual and expected number of children	*All numbers*	*'Most likely' number of children expected in 1967*				
		0	*1*	*2*	*3*	*4*
	%	%	%	%	%	%
Had more children than expected in 1967	16	42	46	13	11	10
Had equal or fewer children than expected in 1967 and:						
still expected same number	55	42	40	68	51	33
expected fewer in 1972	18	—	4	10	32	54
expected more in 1972	7	15	11	9	6	3
No answer	3	4	—	1	*	2
Base	1,384	81	113	718	306	102

Some five years after the initial investigation when the women had been married between five and twelve years, 16 per cent had in fact more children than they had expected at the first investigation, 55 per cent expected the same number, 18 per cent expected fewer children in 1972 than they had done in 1967 and 7 per cent, in addition to the 16 per cent who actually had more, expected a larger number of children. Women who expected two children were least likely to have changed the number of children they expected.

Not only were changes in the number of children expected related to the number initially expected, as illustrated in the table above, but they were also related to the women's actual experience of children. Women who said originally that they expected three or four children but had experience of no or only one child were most likely to have revised their estimates downwards. A growing awareness of infecundity over the first few years of marriage was also associated with fewer children expected in 1972 than in 1967.

However, women who in 1967 (i.e. very early in marriage) thought that there was some impairment to their fecundity were more likely to have exceeded by 1972 the number of children they expected in 1967 and, therefore, to have increased the number of children they said they expected altogether. It may be that their mistaken view of their fecundity led to a less reliable use of family planning since there was some evidence to suggest that couples who had changed their method of family planning more frequently during the period 1967–72 and had 'taken chances' when using family planning were also more likely to have more children than they originally expected.

It seemed to be the *number* of children rather than the sexes of the children which were related to stability in the number of children expected—women who had none or one child in 1972 more frequently had revised their estimates downwards, those with three and particularly four had had to revise them upwards. Those with two children in 1972 were most likely to have maintained their 1967 expectations. However, within each parity there was some variation according to the sex order of the children. For example, among women with two children in 1972, a slightly greater proportion of women had reduced the number of children they expected where the two children were boys, but where the woman was childless in 1967 and had since had two children, an increased number was expected more frequently where the two children were of the same sex (presumably even more so if they were both girls). Women who were relatively lacking in experience of child bearing and rearing were most likely to have reappraised the situation by 1972 and it may be that the birth of the first child—of which its sex is one feature—leads to an adjustment of views about the number of children expected.

There was also some association between changes in views about the number of children expected and the socio-economic characteristics of the couple but none which was so noticeable as to suggest a process whereby external events might be differentially perceived by different couples and hence lead to a change in the number of children expected. The process appears to be more a mechanistic one, affected by an awareness of infecundity and the early use of family planning and, more basically, with experience of children. For this reason, the number of children a woman expects to have may be more validly and reliably assessed some four to five years after marriage rather than at marriage and particular emphasis should be placed on the views of women who at that time had two children.

If, then, the number of children these women expect to have in 1972—after five but less than thirteen years of marriage—are studied, they suggest a mean of 2·3 children expected altogether. This is the same value as the mean number expected by women married for the same length of time five years earlier. But the similarity of values conceals the fact that the proportion of women expecting families of four or more children was lower and so too was the proportion expecting to remain childless, though in the latter case the differences were smaller than those illustrated in the tables since the sample disproportionately omitted childless women in 1967. However, if women with two children at these same durations of marriage are compared, fewer of those interviewed in 1972 expected to go on to have three or more children.

4 Pattern of family building

4.1 Introduction

Within the context of an apparent decline in average family size, and more particularly with smaller variations in family size, changes in the way women go about building up their families become more important in accounting for changes in the period fertility rates and in evaluating the nature of movements in the future. Whether women concentrate their child-bearing in the early years of marriage or extend it, whether families are completed in one or more than one phase will have important implications for social planning in the short or medium term, even if the number of children born to each woman remains unchanged.

Data on these themes based on birth registrations are, of course, available but they are mainly in the form of interval lengths between marriage and the various parities and hence obscure changes in the intervals between individual births. The contributions to the changes made by different groups in the population are less readily investigated from the registration data and additional information which may be related to the way women go about building up their families cannot be incorporated into analyses of birth registrations. Thus, despite the disadvantages of the smaller numbers available for analysis, survey data can make some contribution to assessing the changes in family building patterns.

By 1967, about three-quarters of the women married between 1960 and 1967 had had at least one child at an average interval of 1·6 years after marriage. The study of mean lengths of the intervals between marriage and the first live birth for all women interviewed in 1967 had suggested a decline in the lengths of this interval from the earlier to the later marriage cohorts which was likely to continue for the 1960–64 marriage cohort, but not necessarily for the 1965–67 cohort. In part, this decline was attributable to an increasing proportion of pre-marital conceptions.

Changes in the lengths of the second internatal intervals in 1967 were less easily interpreted. For women married *before* 1960 who had had at least two children at the time of the 1967 interview (and almost all who were likely to have two children had done so), the mean length of the interval between first and second live-born children had declined from earlier to later cohorts. However, for the 1960–64 (and later) cohort, sufficient women had not yet had their second child and if they were to further delay these second births, the ultimate mean length of the second internatal interval could well have been higher than that for the earlier marriage cohorts. Even if an absolute increase in the average length of the second internatal interval did not materialise for the post-1960 marriage cohorts, it seemed likely that the *rate* at which the length of the interval had been previously declining would slow down.

Also, in 1967, women in the later marriage cohorts expected to complete their families when they, themselves, were younger but this was a consequence of marrying earlier as well as of shorter periods of child bearing.

Of the questions raised by the 1967 findings, four were further investigated with the aid of data collected in 1972.

a. What had been the effect of births occurring between 1967 and 1972 on the mean lengths of the internatal intervals?

b. Were the patterns of family building for the 1960–67 marriage cohort different from those of women married for the same length of time five years earlier?

c. If there were differences, were they general throughout all the 1960–67 marriages or were they confined to particular groups in the population?

d. What was the relationship, if any, between actual interval length and the number of children the women expected to have in 1967?

In addition, the relationships between interval length and family size, various socio-economic measures and fecundity limitation were again studied to see whether the marginal associations demonstrated in 1967 were maintained or changed by 1972 for the 1960–67 marriage cohort. In the case of conception control, family planning practices in the five years prior to the 1972 interview were related to the mean lengths of the internatal intervals to suggest more detailed analyses and investigations of the possible relationship. The present form of analysis was not sufficiently comprehensive to do much more. The one exception lay in descriptions of the circumstances in which children born in the five years 1967–72 were conceived. The information collected in 1972 was deliberately confined to births occurring between 1967 and 1972 so that the women's opinions about the lengths of the intervals could be gauged more realistically. The 1970 National Fertility Study in the USA[1] had demonstrated a high degree of unreliability in answers to questions on family planning in the past, even in answers to the question on the birth interval in which the couple had begun to use conception control, let alone the method used. To improve the reliability of answers, it seemed better to ask only about relatively recent events.

For the sake of continuity, the measures used to demonstrate the patterns of family building in 1972 were some of those used in the 1967 study. In particular,

a. the mean number of years between successive live births
and

b. the mean of the wife's age at which her family was expected to be completed were derived from the answers to questions on the dates of marriage, transferred from 1967, on dates of children's births, asked in 1972, and on the age at which the wife expected (or thought) she had completed her family, using both 1967 and 1972 information.

The qualifications which affected the interpretation of the measures in 1967 were of lesser importance, on the whole, in 1972. For example, the upper age limit set for the original survey resulted in the omission of women who married late from the earlier marriage cohorts. However, the 1960 or later marriages included in the follow-up study were insignificantly affected by this omission. Similarly, in 1967, a considerable proportion of women married in 1960 or later had still to experience their first, and an even larger proportion their second, live birth and this resulted in the 1967 estimates reflecting, disproportionately, the experience of those women who, by definition, had their births early in marriage. By 1972, 90 per cent of women married between 1960 and 1967 had had at least one liveborn child (not more than 98 per cent are likely to do so) and 72 per cent had had at least two. The remaining women likely to have first and second births after the 1972 interview were, probably, too few to radically affect the summary interval statistics.

The main measures were, however, based on live births and changes in the intervals between them incorporated varying rates of foetal death. Such rates were low and were unlikely, therefore, to account for the greater part of any observed variation in the lengths of internatal intervals. However, the possibility needs to be borne in mind when assessing differences based on the experience of a small number of women. It needs to be remembered, also, particularly in relation to the length of the first internatal interval, that all pre-marital and illegitimate births were excluded from the study. Pre-marital conceptions that resulted in births after marriage were included. There remains also the possibility, found in the USA[1], that some women adjusted the dates of their marriage to make some pre-marital births appear legitimate.

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[1] N B Ryder and C F Westoff. *Reproduction in the United States 1965*. (1971).

Of much greater importance was the limitation imposed on the analysis by the omission of births occurring between 1967 and 1972 to women married in that period. This prevented the analysis of data by the year of the child's birth. As the discussion in the later section suggests, a noticeable change in the lengths of birth intervals irrespective of parity appears to have been initiated in about 1968–69. However, in the absence of birth data for the 1968–72 marriage cohort, the findings remain tentative. Conversely, but of lesser importance, the omission of data on late births to women married in the 1950s also qualified the interpretation of the analyses by the date of the child's birth.

The lengths of intervals were derived from the dates given for the live births occurring to the women in the sample; the ages at which women said they expected to complete their families were based on the actual age at which they had their last child (derived from the dates of birth of both mother and child) if they expected no more children; otherwise it was the age at which the women said they *expected* to have their last child.

4.2 **Internatal intervals for those married 1960–67**

The discussion is pursued mainly in terms of the first and second intervals: between marriage and the first liveborn child and between the first and second. The higher order intervals were altogether few in number and, by 1972, only a very small proportion of the later marriage cohorts had had a third or fourth live birth.

4.2.1 *First internatal intervals*

By 1972, 90 per cent of the re-interviewed women had had at least one child. The proportion was probably slightly higher than would be expected from the 1960–67 marriage cohort since proportionately more of the childless were omitted from the re-interview. Nevertheless, almost all who could be expected to experience a live birth had done so and any future first births to this group were unlikely to affect the distribution of interval lengths to any substantial extent.

On average, these first live births had occurred some 2·2 years after marriage. However, the mean length of the first internatal interval varied from 2·6 years for marriages which took place in 1960–61 to 1·9 years for those married between 1966–67. In part, this is due to the variations in the lengths of time available for the births: women married earlier had the possibility of longer first intervals while those married later had, at the date of interview, only shorter periods in which to have had a child.

However, the major points of interest in table 4.1 are the significant decline in the mean length of the interval for the 1962–63 marriage cohorts and the *absence* of any decline for marriages between 1964–65 compared with the earlier cohort. Since the absence of a decline in the recorded measure for the 1964–65 cohort

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[1] Ryder and Westoff op. cit.

Table 4.1 *Women married 1960–67*

Lengths of intervals between live births (analysed by wife's age at marriage and date of marriage)

Date of marriage and wife's age at marriage	*Numbers of married women*	*Mean number of years between live births*				*Percentage of women having*				*Percentage of women whose first live birth was up to and including 8 months after marriage*
		Marriage to 1st	*1st to 2nd*	*2nd to 3rd*	*3rd to 4th*	*1 live birth*	*2 live births*	*3 live births*	*4 live births*	
						%	%	%	%	%
(a) All ages at marriage										
All dates	1,384	2·2	2·6	2·7	2·6	90	72	25	6	19
1960–61	365	2·6	2·8	2·8	3·0	94	82	40	14	17
1962–63	387	2·1	2·5	3·0	(2·5)	93	78	30	7	16
1964–65	404	2·2	2·5	2·1	(1·7)	90	69	18	4	20
1966–67	228	1·9	2·5	(2·1)	(1·5)	81	51	8	1	22
(b) Under 20										
All dates	406	1·8	2·6	2·5	(2·8)	95	81	33	10	33
1960–61	101	2·4	2·8	2·5	(3·4)	96	89	51	18	26
1962–64	188	1·7	2·4	2·7	(2·3)	98	87	35	10	29
1965–67	117	1·5	2·6	(1·8)	(1·6)	91	68	15	3	47
(c) 20–24										
All dates	761	2·5	2·7	2·9	(2·7)	90	71	23	5	13
1960–61	210	2·7	2·8	3·0	(3·1)	95	81	36	12	15
1962–64	317	2·4	2·7	3·0	(2·5)	93	77	24	4	12
1965–67	234	2·3	2·6	(2·0)	(1·1)	83	53	9	1	13
(d) 25 or over										
All dates	217	2·2	2·4	(2·7)	(1·8)	83	60	20	6	10
1960–61	54	2·3	(2·6)	(2·8)	(1·9)	89	74	35	13	11
1962–64	101	2·2	2·2	(2·5)	(1·6)	84	58	18	6	10
1965–67	62	2·1	(2·3)	(2·7)	(2·0)	76	52	10	2	10

is combined with a larger proportion of women who could expect first births after the 1972 interview, this suggests an increase in the mean length of the first internatal interval, overall, for the 1964–65 cohort compared with the 1962–63 cohort. The increase compared with the 1962–63 cohort may well apply to the 1966–67 marriage cohort also, but whether the mean interval length for the 1966–67 cohort will ultimately be higher than that for the 1964–65 cohort remains a matter of speculation. The data suggest that the rapid fall in first interval length culminated in the experience of the 1962–63 marriage cohort and that later marriages experienced a stabilisation, if not actually an increase, in the mean length of the first internatal intervals.

Corroborative evidence is obtained if assumptions are made about the child-bearing potential of the women. Two alternative assumptions were made: that 95 per cent and 98 per cent, respectively, of women in each marriage cohort will eventually have at least one liveborn child. If these assumptions are made, then the median values for the first internatal intervals can be calculated for the completed cohorts. Table 4.2 indicates that the shortest median first intervals were experienced, as expected, by the 1962–63 marriage cohort and that the median length of the intervals increased in length for the later cohorts; perhaps more for the 1964–65 cohort than for the 1966–67.

More detailed inspection of table 4.2 shows that the increase in the median length of the first interval for the 1964–65 marriage cohort occurred despite an increase in the proportion of women who had had a live birth less than nine months after marriage. Though differences were small, there is a suggestion that proportionately fewer women in the 1964–65 cohort had had their first maritally conceived child within two and a half years of marriage, while more had waited three to five years. The pattern in first intervals for the 1964–65 marriages seems closer to that for 1960–61 marriages while the distribution of first intervals for the 1966–67 marriages exhibited a growing dichotomy between an increasing proportion of women with a probable pre-maritally conceived first birth and an increasing proportion of women who seem likely to wait for at least five years

Table 4.2 *Women married 1960–67*
Percentage distribution of lengths of interval between marriage and the first liveborn child (analysed by date of marriage)

Number of months between marriage and the first liveborn child	*All dates*	*Date of marriage*			
		1960–61	*1962–63*	*1964–65*	*1966–67*
	%	%	%	%	%
Less than 9 months	21	18	18	22	27
9–12	13	13	14	12	10
13–18	13	12	15	13	13
19–24	13	9	15	12	15
25–30	10	12	12	8	11
31–36	6	6	5	6	5
37–42	5	4	4	5	5
43–48	5	5	4	7	3
49–54	4	5	3	3	5
55–60	4	3	2	5	2
61–72	4	7	3	4	3
73–84	2	2	2	2	—
85–96	1	2	1	1	—
97 or more	1	1	1	—	—
Total number of women with at least one live birth[1]	1,253	343	359	365	185
Total number of women	1,384	365	387	404	228
Percentage of women with at least one live birth	90	94	93	90	81
Median length of interval assuming					
(i) 95 % of women	21·6	23·8	20·8	21·7	21·1
(ii) 98 % of women	22·4	24·7	21·4	22·5	21·8
have at least one live birth (months)					
Percentage of women likely to wait 60 or more months for birth of first child assuming					
(i) 95 % of women	—	13	8	11	17
(ii) 98 % of women	—	16	12	14	19
have at least one live birth					

[1] Excludes 1–2 % of women for whom length of the interval was not known.

after marriage for the birth of their first child. If, again, it is assumed that 95 per cent and 98 per cent, respectively, of women in each cohort will have ultimately at least one liveborn child, then 17 per cent and 19 per cent, respectively, of women married in 1966–67 will have a first internatal interval of five years or more, compared with 8 per cent and 12 per cent of the 1962–63 cohort and 11 per cent and 14 per cent of the 1964–65 cohort (table 4.2).

That women married 1962–63 were particularly subject to short first intervals is made clearer in table 4.5 when marriages of similar durations in 1967 and 1972 are compared.

4.2.2 *Second internatal intervals*

The 1967 study came to the conclusion that the *rate* at which the mean length of the interval between first and second live births had been declining from the earlier to the later marriage cohorts was unlikely to continue. The data from 1972 suggest that not only had the rate of decrease slowed down, but that the absolute length of the second interval will actually increase for the 1964 and later marriage cohorts compared with the 1962–63 cohort. Women married between 1962 and 1963 had had their second child 2·5 years, on average, after the first (and 78 per cent of them had had a second child). Similarly women married between 1964 and 1965 who had had a second child had done so at an average interval of 2·5 years after the first but at least another 10 per cent were likely to have a second child after the 1972 interview and this would have the effect of increasing the ultimate mean length of the second interval for the later marriage cohort. This situation is even more marked for women married between 1966 and 1967.

Table 4.3 *Women married 1960–67*

Length of interval between marriage and second live birth (analysed by date of marriage)

Number of years between marriage and second live birth	*Date of marriage*			
	1960–61	*1962–63*	*1964–65*	*1966–67*
	Number of women			
Less than 3	80	80	75	47
3–4	52	77	71	31
5–6	77	93	90	36
7–8	51	37	39	3
9–10	35	15	4	—
More than 10 years	4	1	1	—
Number of women with two or more live births	300	306	280	118
Number of women in marriage cohort	365	387	404	228
Number of women likely to have two or more live births[1]	300	317	331	187
Number of women likely to have second births after interview	—	11	51	69

[1] Assuming 82% of each cohort. A higher percentage would have the effect of increasing the proportions at the longer durations, i.e. at five years or longer.

Table 4.4 *Women married 1960–67*

Percentage distribution of length of interval between marriage and second live birth based on those likely to experience a second live birth (analysed by date of marriage)

Number of years between marriage and second live births	*Date of marriage*			
	1960–61	*1962–63*	*1964–65*	*1966–67*
	%	%	%	%
Less than 3	27	25	23	25
3–4	17	24	21	17
5 or more	56	50	56	58
Base (those likely to have a second live birth)	300	317	331	187

Estimates of the lengths of the interval between marriage and the second live birth, based on the assumption that at least 82 per cent of women in all marriage cohorts would finally have at least two children, are illustrated in tables 4.3 and 4.4.[2] Given the interval data for those who already had second children, an estimate is made for the number of women likely to have a second child after the 1972 interview and, by definition, this would be at least four-and-a-half to five years after marriage. This proportion, together with those known to have an interval of five years or more after marriage before the birth of their second child, produces the last row of percentages in table 4.4. These percentages suggest an increasing proportion of the consecutive marriage cohorts with intervals between marriage and the birth of a second child of five years and longer. This proportion was relatively low for the 1962–63 cohort but increased sharply for the 1964–65 cohort to a level similar to that for the 1960–61 cohort, and is likely to increase again for the 1966–67 cohort to 58 per cent.

4.2.3 *Third and fourth internatal intervals*

Apart from the problem of small numbers, a further difficulty besets the interpretation of the summary statistics illustrating the distribution of the lengths of third and higher order intervals: in a time of changing family size—more specifically when there is a swing away from families of four and possibly three children—it is difficult to make any estimates for the ultimate size of the groups who will experience these parities. Conclusions must remain tentative in the knowledge that any reduction in the proportion of women having a third or fourth child within a specific period after marriage could signify an absolute reduction in the proportion or it could signify a delay in births.

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[2] There is little evidence to suggest a swing away from a two-child family or that childless or single-child families are increasing in frequency. Most married women will have at least two children.

Perhaps the most obvious conclusion to be drawn from the data in table 4.1 about the interval between second and third live births is that, overall, the mean length of the interval for the 1966–67 cohort was the same as that for the earlier cohort (2·1 years) and this despite the smaller proportion of women with a third child. The numbers on which the computations were based were small, but it does imply a lengthening, on average, of the third internatal interval for the 1966–67 cohort. The evidence for the 1964–65 cohort is less clear-cut.

It is of interest to note that the mean length of the third internatal interval for the 1962–63 cohort—the cohort for which the first and second intervals were relatively short—was longer than that for the 1960–61 cohort and that any further third births to the 1962–63 cohort after the interview would have the effect of further increasing the mean length.

This suggests that the lengthening or shortening of the intervals between births is less related to a generalised strategy of family building which the couple has at the time of marriage and is more a function of events operating at a point in time which lead to a delay or a greater concentration of births: the third children born to the 1962–63 cohort occurring some 6–7 years after marriage coincided, in time, with the second births (some 4–5 years after marriage) to those married between 1964 and 1965. The intervals preceding these births were both, on average, longer than the comparable intervals for the earlier cohort. The events which led to a delay in births from about 1968–69 appeared to be operating until the 1972 interview but not necessarily at an increasing rate. However, in the absence of data on the 1967–72 births to women married between 1967 and 1972, this remains a speculation, though the general conclusion that birth intervals were particularly responsive to external events remains compelling.

To compensate for the varying lengths of exposure which affect the differences between marriage cohorts, changes in family building patterns over time are more reliably assessed by comparing the situations of marriages of similar durations. This is illustrated in table 4.5 where the lengths of the internatal intervals for women married for the same lengths of time in 1967 and in 1972 are compared.

4.2.4 *First internatal intervals*

For the first internatal interval, one of the noticeable features is the change in the proportion of women at similar durations of marriage with at least one live birth. Whereas a higher proportion of those married 9–12 years in 1972 had at least one live birth compared with those married a similar length of time in 1967, at shorter durations of marriage an increasing proportion of the women interviewed in 1972 had not yet had their first child. Of those married 5–6 years in 1972, 19 per cent of women had not yet had or would not have at all a first child compared with 13 per cent of those married for the same length of time five years earlier.

Among those who had had at least one child, there were also differences in the length of time which had passed between marriage and the birth of the first child. At each duration of marriage, a higher proportion of women interviewed in 1972 had had a first live birth within nine months of marriage. Perhaps more important were the variations for the different durations of marriage. Women married for 9–10 years in 1972 (i.e. married in 1962–63) had had a very different distribution of first interval lengths compared with those married the same length of time five years earlier. Apart from the higher proportion of probably pre-

Table 4.5 *Women married 1960–67*
Women married 1955–62

Percentage distribution and mean length of internatal intervals (analysed by duration of marriage in 1967 and 1972)

Number of months	*Duration of marriage*									
	All durations		*11–12 years*		*9–10 years*		*7–8 years*		*5–6 years*	
	in 1967	*in 1972*	*in 1967*	*in 1972*	*in 1967*	*in 1972*	*in 1967*	*in 1972*	*in 1967*	*in 1972*
	%	%	%	%	%	%	%	%	%	%
Marriage: 1st live birth										
Less than 9 months	15	21	11	18	13	18	14	22	19	27
9–12	18	13	19	13	18	14	18	12	17	13
13–18	15	13	13	12	15	15	16	13	17	13
19–24	13	13	13	9	13	15	14	12	12	15
25–30	7	10	7	12	7	12	7	8	6	11
31 or more	32	30	37	36	34	26	30	33	28	21
Number of women with 1st birth[1]	2,180	1,253	551	343	540	359	541	365	548	185
Mean length of interval (years)	2·2	2·2	2·5	2·6	2·4	2·1	2·1	2·2	1·9	1·9
Percentage of women with 1st birth	90	90	91	94	91	93	91	90	87	81
1st–2nd live birth										
12 months or less	5	12	4	12	3	11	7	11	6	15
13–18	17	12	14	11	15	13	16	12	23	9
19–24	20	18	18	17	19	16	20	20	22	19
25–30	17	15	15	13	19	17	16	16	19	15
31–36	16	15	15	14	17	18	18	11	13	19
37 or more	26	29	34	32	27	27	23	30	17	24
Number of women with 2nd birth[1]	1,673	999	452	299	439	303	409	280	373	117
Mean length of interval (years)	2·6	2·6	2·9	2·8	2·6	2·5	2·5	2·5	2·2	2·5
Percentage of women with 2nd birth	69	72	75	82	74	78	69	69	59	51
2nd–3rd live birth										
12 months or less	5	11	1	11	5	8	6	15	8	(11)
13–18	22	13	16	15	18	5	29	21	36	(11)
19–24	19	16	21	10	17	21	15	23	26	(6)
25–30	15	15	15	13	18	16	13	8	15	(50)
31–36	12	12	11	13	12	9	15	17	10	(11)
37 or more	27	33	37	37	31	42	22	15	6	(11)
Number of women with 3rd birth[1]	669	350	213	145	199	116	158	71	99	18
Mean length of interval (years)	2·5	2·7	3·0	2·8	2·6	3·0	2·3	2·1	1·8	(2·1)
Percentage of women with 3rd birth	28	25	35	40	33	30	27	18	16	8
3rd–4th live birth										
12 months or less	6	11	2	6	9	(11)	(9)	(24)	(9)	(50)
13–18	22	12	10	12	25	(7)	(31)	(24)	(64)	—
19–24	23	20	24	10	25	(26)	(19)	(35)	(18)	(50)
25–30	19	14	26	18	18	(11)	(9)	(6)	—	—
31–36	12	13	16	16	9	(11)	(9)	(6)	(9)	—
37 or more	18	30	22	38	15	(33)	(22)	(6)	—	—
Number of women with 4th birth[1]	213	96	90	50	80	27	32	17	11	2
Mean length of interval (years)	2·2	2·6	2·6	3·0	2·0	(2·5)	(2·1)	(1·7)	(1·4)	(1·5)
Percentage of women with 4th birth	8	6	15	14	13	7	5	4	2	1

[1] Excluding in the case of the 1972 data 1–2% no answers on interval length.

marital conceptions, a much lower proportion had waited 31 months or more for the birth of their first child. At the extreme of the range (not shown) just over half the proportion of women interviewed in 1972 as interviewed in 1967 (and married 9–10 years) had waited five years or longer for the birth of their first child.

This concentration of first births into a period of two and a half years or less after marriage which characterised the marriages which took place in 1962–63 contrasts with the extension of the first interval for marriages of 7–8 years' duration in 1972. Although a much higher proportion of births took place less than nine months after marriage compared with those married 7–8 years earlier, an increased proportion also waited longer than two and a half years for the birth of their first child. Proportionately fewer of the 7–8 year marriages in 1972 had first children born between nine months and two years of marriage.

The polarisation between first births which were probably pre-maritally conceived and those which were delayed until some two-and-a-half years or longer after marriage is continued for marriages of 5–6 years' duration in 1972. Relatively few first births took place between nine and eighteen months of marriage compared with marriages which occurred five years earlier; proportionately more were born less than nine months after marriage (27 per cent compared with 19 per cent) and an increased proportion took place after two years, combined with an increased proportion who had not yet had a first birth some five years after marriage.

What the data do indicate is that the similarity of the mean lengths for the first interval, particularly for marriages of 5–8 years' duration, concealed different patterns of family building for women with similar durations of marriage in 1972 and in 1967.

4.2.5 *Second internatal intervals*

Similarity of means also screened the differences in the lengths of the intervals between first and second live births. Marriages of 9–12 years' duration in 1972 exhibited similar mean values for the lengths of the second internatal intervals as did marriages of the same length five years earlier: 2·8 years compared with 2·9 years for those married 11–12 years and 2·5 years compared with 2·6 years for those married 9–10 years. However, the distributions differed. A greater proportion of those married 9–12 years in 1972 had had their second child within a year of their first and this, combined with a higher proportion who had had a second child within 12 years of marriage, indicated some contraction of the interval between first and second children compared with women married the same length of time when interviewed in 1967.

For marriages of shorter duration—those married 1964–67 and assessed in 1972 and those married 1959–62 and assessed in 1967—the comparison suggested a lengthening of the interval (particularly for those married 5–6 years) brought about despite an increase in the proportion of women who had their second child within a year of their first. An increased proportion of the women—particularly those married 5–6 years in 1972—were waiting three years or more after the birth of their first child for their second.

The increasing dichotomy between women who had a second child relatively quickly after the first and those who delayed the birth of their second child some two-and-a-half to three years or more paralleled the situation demonstrated for first intervals. The result of the dichotomy was an absolute increase in the length of the second internatal intervals for marriages of 5–6 years' duration in 1972 compared with those of similar duration five years earlier and compared with marriages of 7–10 years' duration in 1972—a possibility envisaged in the 1967 study.

4.2.6 *Third and fourth internatal intervals*

Again, the data are included for completeness, though for the shorter durations of marriage the numbers of women concerned were too few to make for reliable conclusions and, in any case, the experiences of women with short intervals are inevitably over-represented.

The increase in the mean length of the third internatal interval appeared to begin with marriages of 9–10 years' duration in 1972 (i.e. marriages which took place in 1962–63) while that in the fourth interval affected marriages which took place in 1960–61. For marriages of shorter durations, there was a considerable fall in the proportion of women with third and fourth births when women interviewed in 1972 were compared with those interviewed in 1967. Whether this is an absolute decrease in the proportion of women who are likely to have third or fourth children or whether it signifies a delay in such births is not readily discernible from the available data. However, it does seem clear that even if only a few more third children were born after 1972, the effect would be to increase the mean lengths of the third interval to values above those for similar durations of marriage five years previously.

4.3 Patterns of family building and some socio-economic variables

The objects of this section are two-fold:

a. to see whether the changes in the ways families were built up, illustrated in the previous section, were widespread throughout all the 1960–67 marriages or were confined to particular groups in the population
and

b. to check on the extent of the relationship between the intervals between births and some of the socio-economic characteristics of the couple: in particular, educational level and occupation were considered because they had previously discriminated between families of different size if not between patterns of family building in the population. Religion was also included because it is popularly believed to distinguish between family building patterns although it had been increasingly demonstrated that such differences tend to resolve themselves in educational and occupational differences.

In order to describe the variations in family building patterns, two measures have been used. The first is the percentage of women who had *not* had a second child within five years of marriage and the second is the length between marriage and the *second* live birth. The latter measure was preferred to the descriptions of other intervals since it was less subject to the variations due to pre-marital conceptions that affected first intervals, but it was more general than the second interval alone. It was also an interval which was likely to be experienced by the majority of married women and would better reflect differences between groups in the population. Its disadvantage was that, for the more recent marriage cohorts, only about half the women (52 per cent of those married between 1966 and 1967) had had a second child. For this reason, the percentage of women who had *not* had a second child within five years of marriage was also included in the analysis i.e. those with fewer than two children and those whose second child was born after five years of marriage.

One major limitation affects the data in this section and it leads to conclusions which can only be indicative and not definitive. This limitation is also linked to the reason why alternative formulations of the analysis were unlikely to prove more illuminating. In the initial specification, in order to obtain reasonable numbers for analysing date-of-marriage groups by a third variable, the original four date-of-marriage groups, 1960–61, 1962–63, 1964–65, 1966–67, were combined to form three: 1960–61, 1962–64, 1965–67. As the previous section has shown, the important differences in recent family building patterns seemed to have occurred between the 1962–63 and the 1964–65 marriage cohorts and these differences are confounded by the three-group classification. However, as inspection of tables 4.6 and 4.8 shows, numbers in the socio-economic subcategories were very small even with three date-of-marriage groups. A re-analysis on the basis of four groups would result in even fewer individuals in a large number of sub-groups, making the findings even more inconclusive. Thus the three group classification has been retained but only the more noticeable trends or differences over all the date-of-marriage groups are commented upon as indicating the characteristics of groups who were most likely to have changed their family building patterns.

For the sake of brevity, the analysis of the lengths of the intervals between marriage and the birth of the second child has been carried out in terms of the differences between mean lengths. As the previous section has shown, similarity of means can conceal differences in the distribution of interval lengths for the various cohorts. Again, the small number of the various socio-economic groups make doubtful the usefulness of a more detailed analysis.

Before considering the differences in the main socio-economic sub-groups in the population, a comment on the changing family building patterns of women who married at different ages is relevant. The data are given in table 4.1. They suggest that whereas differences in the mean length of the first interval were more or less uniform throughout the groups, women who married young in the more recent cohort had a longer *second* internatal interval, on average, than those who married young in earlier cohorts. Despite a lower proportion who had had a second child (91 per cent compared with 98 per cent), women who had married under 20 years of age in 1965–67 experienced, on average, an interval of 2·6 years between the births of their first and second child, while the comparable figure for the earlier cohort was 2·4 years. The second births likely to occur to the more recent cohort after the 1972 interview would have the effect of increasing even further the value of 2·6. This adds weight to the view that those who married young recently were not necessarily the same kind of people who married young in the past and that, in particular, they are more likely to be able to exercise control over their own fecundity. Therefore changes in the ages at which women marry will probably be of lesser importance in accounting for changes in fertility in the future.

4.3.1 *Changes among sub-groups*

The percentage of women in the various sub-groups who had *not* had two live births within five years of marriage is illustrated in table 4.6. The changes over the marriage cohorts most suggestive of a delay in having a second child, seemed to apply to those groups where the husband was in a managerial or in an unskilled occupation in 1967, particularly if in the former case he was also in a managerial occupation in 1972 and, in the latter case, if he was upwardly mobile in 1972; also where the husband completed his education at 15 years and the wife at 16 or over, where both completed their education between 16 and 19 years of age, and where both husband and wife were Catholic or where both were Christian but neither Catholic (that is, the main groups). In all these sub-groups, the proportions of the couples married in 1965–67 who had not had a second child within five years of marriage were higher than for those in the same socio-economic groups who had married between 1960–64. This is not to say that the absolute proportions were themselves high or low, but that these seemed to be the characteristics which were associated with a tendency to delay second births in the later cohort. Where those in managerial occupations are concerned, the delay among the later cohorts may only be a reaction to the relatively larger increase in family size and shortening of birth intervals for similar marriages in the late 1950s and early 1960s and a reversion to an earlier pattern for marriages in this occupational group. Both for this group and for the unskilled, upwardly mobile, delays in second births may also be a response to increasingly difficult economic circumstances.

The fact that the delay in second births affected most of the larger religious groups and that, in any case, differences between the groups over the various marriage cohorts were small, again suggests that changes in birth intervals were responses to temporary external events and not reflections of basically different views which underlie affiliation to different religious groups.

Since a major part of the variation in interval length is accounted for by differences in the number of children liveborn the data on the length of the

Table 4.6 *Women married 1960–67*

Percentage of women who have *not* had two live births within five years of marriage (analysed by date of marriage and some socio-economic variables)

	Number of women married			*Percentage of those married who had* not *had two live births within five years of marriage*		
	1960–61	*1962–64*	*1965–67*	*1960–61*	*1962–64*	*1965–67*
1967 socio-economic group				%	%	%
Managerial	57	100	63	56	58	68
Non-manual	85	112	96	66	68	68
Skilled manual	144	261	185	69	62	63
Unskilled manual	76	130	65	58	55	63
Changes in husband's socio-economic group						
1967 managerial, 1972 managerial	47	74	48	(57)	55	(71)
1967 managerial, 1972 all other categories	10	26	15	(50)	(65)	(60)
1967 non-manual, 1972 non-manual	49	74	77	(67)	70	69
1967 non-manual, 1972 managerial	27	27	18	(67)	(59)	(61)
1967 non-manual, 1972 manual	9	11	1	(56)	(73)	(100)
1967 skilled manual, 1972 skilled manual	98	202	137	67	61	64
1967 skilled manual, 1972 managerial/non-manual	26	37	28	(89)	(62)	(64)
1967 skilled manual, 1972 unskilled manual	20	22	20	(55)	(64)	(55)
1967 unskilled manual, 1972 unskilled manual	44	59	30	(61)	58	(57)
1967 unskilled manual, 1972 skilled manual	25	51	24	(52)	53	(67)
1967 unskilled manual, 1972 managerial/non-manual	7	20	11	(57)	(55)	(73)
Religion						
Husband and wife Christian but not Catholic	273	434	295	65	64	69
Wife Catholic, husband other Christian	16	33	20	(56)	(58)	(55)
Husband Catholic, wife other Christian	11	32	19	(55)	(59)	(47)
Husband and wife Catholic	25	36	24	(55)	(47)	(67)
Husband and wife non-Christian	25	41	32	(68)	(51)	(44)
Other combinations	14	30	23	(57)	(53)	(65)
Age completed full-time education						
Husband 15 or below, wife 15 or below	195	291	194	63	58	59
Husband 15 or below, wife 16–19 Husband 15 or below, wife 20 or more	53	77	54	68	66	73
Husband 16–19, wife 15 or below	37	75	49	(70)	63	(69)
Husband 16–19, wife 16–19	52	93	65	65	71	72
Husband 16–19, wife 20 or more	4	13	4	(25)	(54)	(50)
Husband 20 or more, wife 15 or below	10	26	14	(33)	(42)	(57)
Husband 20 or more, wife 16–19	7	14	17	(86)	(50)	(31)

intervals between marriage and the second live birth were separately analysed for those with two and those with three or more liveborn children. Table 4.7 summarises the distributions. The actual proportions of women in each marriage cohort with less than two, two and three or more liveborn children are given in table 2.10. Table 4.7 does show, of course, that those who had three or more children took a shorter time, on average, to achieve two children than did those

Table 4.7 *Women married 1960–67*

Length of interval between marriage and second live birth (analysed by date of marriage and number of live births in 1972)

Length of interval between marriage and 2nd live birth	*Those with two live births*					*Those with three or more live births*				
	All dates	*Married*				*All dates*	*Married*			
		1960–61	*1962–63*	*1964–65*	*1966–67*		*1960–61*	*1962–63*	*1964–65*	*1966–67*
	%	%	%	%	%	%	%	%	%	%
Less than 3 years	17	9	13	18	33	48	44	46	50	(75)
3–4 years	22	14	24	25	28	24	21	28	26	(20)
5–6 years	34	30	35	37	36	21	21	23	18	(5)
7–8 years	17	25	18	17	3	5	9	2	5	—
9 or more years	8	22	9	2	—	2	5	—	—	—
No answer	1	1	1	—	1	*	—	1	—	—
Mean number of years	4·8	5·9	5·0	4·5	3·6	3·4	3·7	3·2	3·2	2·3
Total number of women with two or more live births	639	151	186	204	98	365	149	120	76	20

who only had two. However, the main interest lies in the differences between marriage cohorts.

These suggest that the length of the intervals between marriage and the second live birth has continued to decline from cohort to cohort for women with two children, in the main. Given that comparable proportions of the 1960–65 cohorts had had two children and that, for a large proportion, this was their completed family, the mean length of the intervals had declined from 5·9 years for those married in 1960–61 to 5·0 years certainly for those married 1962–63 and probably to 4·5 years for those married 1964–65. The situation of those married 1966–67 with two children is more uncertain since a larger proportion of this cohort will go on to have three or more children, while those with fewer than two in 1972 will go on to have two children at, by definition, longer intervals. If all the women married in 1966–67 and with fewer than two children in 1972, go on to have a second child after 1972—that is, at an interval of six years on average, after marriage—then the decline in the interval length would not be maintained for the 1966–67 cohort.

Among those with three children, the decline in the mean length of the interval between marriage and the second live birth was halted for the 1964–65 cohort: in fact, the 1962–63 marriage cohort had the shortest mean length of interval, while the 1964–65 cohort, with a much lower proportion of women with three or more children had the same mean length. Later third births, even to a small proportion of the 1964–65 cohort, would have the effect of actually increasing the mean length for the 1964–65 cohort.

When the data were analysed by the socio-economic sub-groups (table 4.8), the conclusions about the characteristics of sub-groups most likely to be affected by delays in second births were similar to those which derived from table 4.6. The groups which for 1965–67 marriages had, on average, a longer mean interval than earlier cohorts were those with two children where the husband and wife completed their education at 20 years or over, and where the husband was in an unskilled manual occupation in 1967 but in a skilled or non-manual/managerial occupation in 1972. For those with three children in 1972, couples who completed their education between 16–19 years of age, or where the husband or both husband and wife were Catholic had, on average, a mean length of interval for the 1965–67 cohort which was greater than or equal to the mean length for the earlier cohort.

As with most changes in patterns of family building, differences between sub-groups in the population were not substantial. However, the data did indicate that such delays in births as did occur were more likely to affect couples where the husband was in a managerial occupation in 1967 and in 1972 or in a non-skilled manual occupation in 1967 but upwardly mobile since. Catholic couples were also more likely to delay births. In all these groups, proportionately more of the later marriage cohorts had not had two children within five years of marriage compared with earlier cohorts, and for those with two or more children the mean length of the internatal intervals was longer for the later cohorts. However, it may be that the more recent delays among these groups offset what was a disproportionately faster contraction of the intervals which affected the 1962–63 marriages among these sub-groups.

4.3.2 *Some socio-economic variations and interval lengths*

In 1967, though overall differences were small, the data suggested that for pre–1960 marriages, the length of the second internatal interval was inversely related to educational level; the higher the age at which the wife had completed her education, the shorter the average length of the *second* interval. There was also the suggestion that *first* intervals were, on average, shorter for couples

Table 4.8 *Women married 1960–67*

Mean number of years between marriage and second live birth (analysed by date of marriage, number of live births and some socio-economic variables)

	Those with two live births							
	Married				*Number of women with two live births (married)*			
	1960–67	*1960–61*	*1962–64*	*1965–67*	*1960–67*	*1960–61*	*1962–64*	*1965–67*
Changes in husband's socio-economic group								
1967 managerial, 1972 managerial	5·1	(6·0)	(5·1)	(4·3)	85	24	39	22
1967 managerial, 1972 all other categories	(4·9)	(6·8)	(4·5)	(4·1)	26	6	13	7
1967 non-manual, 1972 non-manual	5·0	(6·2)	(4·8)	(4·3)	98	24	38	36
1967 non-manual, 1972 managerial	(5·2)	(6·2)	(5·1)	(4·0)	39	12	19	8
1967 non-manual, 1972 manual	(5·1)	—	(5·7)	—	7	1	5	1
1967 skilled manual, 1972 skilled manual	4·7)	(5·8)	(4·7)	3·9	204	41	102	61
1967 skilled manual, 1972 managerial/non-manual	(4·9)	(5·9)	(4·9)	(3·0)	45	16	21	8
1967 skilled manual, 1972 unskilled manual	(4·5)	(6·3)	(5·1)	(3·6)	19	2	8	9
1967 unskilled manual, 1972 unskilled manual	(4·6)	(5·9)	(4·4)	(3·6)	48	14	18	16
1967 unskilled manual, 1972 skilled manual	(4·6)	(4·8)	(4·5)	(4·6)	42	4	27	11
1967 unskilled manual, 1972 managerial/non-manual	(4·3)	(4·0)	(4·3)	(4·5)	20	5	9	6
Religion								
Husband and wife Christian but not Catholic	5·0	6·0	4·9	4·2	469	119	222	128
Wife Catholic, husband other Christian	(4·4)	(6·4)	(4·3)	(3·2)	29	5	15	9
Husband Catholic, wife other Christian	(4·3)	(5·1)	(5·3)	(3·1)	26	4	10	12
Husband and wife Catholic	(4·9)	(6·2)	(4·6)	(4·4)	31	7	15	9
Husband and wife non-Christian	(4·2)	(4·9)	(4·2)	(3·6)	49	12	20	17
Other combinations	(4·0)	(5·2)	(4·2)	(3·3)	31	3	17	11
Age completed full-time education								
Husband 15 or below, wife 15 or below	4·8	6·1	4·7	4·0	289	68	132	89
Husband 15 or below, wife 16–19	4·6	(5·8)	(4·5)	(3·9)	87	22	37	28
Husband 15 or below, wife 20 or more	(5·0)	(4·7)	—	—	5	3	1	1
Husband 16–19, wife 15 or below	4·9	(6·2)	(4·8)	(3·9)	76	16	39	21
Husband 16–19, wife 16–19	5·1	(5·7)	5·2	(4·4)	110	28	58	24
Husband 16–19, wife 20 or more	(4·9)	—	(4·9)	(3·2)	12	1	8	3
Husband 20 or more, wife 15 or below	(5·9)	(8·8)	(5·3)	—	7	2	4	1
Husband 20 or more, wife 16–19	(4·8)	—	(4·5)	(4·0)	12	1	8	3
Husband 20 or more, wife 20 or more	(3·9)	(2·9)	(3·6)	(4·5)	20	4	6	10
	Those with three or more live births							
Changes in husband's socio-economic group								
1967 managerial, 1972 managerial	3·4	(3·8)	(3·2)	(3·2)	50	19	24	7
1967 managerial, 1972 all other categories	(3·7)	(3·0)	(4·7)	(1·3)	14	4	8	2
1967 non-manual, 1972 non-manual	(3·5)	(3·8)	(3·4)	(2·8)	33	14	14	5
1967 non-manual, 1972 managerial	(3·7)	(4·1)	(3·1)	(2·7)	19	12	5	2
1967 non-manual, 1972 manual	(3·2)	(3·3)	—	—	7	6	1	—
1967 skilled manual, 1972 skilled manual	3·2	(3·4)	3·3	(2·6)	107	36	52	19
1967 skilled manual, 1972 managerial/non-manual	(3·9)	(6·3)	(3·3)	(2·3)	16	4	19	2
1967 skilled manual, 1972 unskilled manual	(3·6)	(4·2)	(3·0)	(2·8)	22	13	6	3
1967 unskilled manual, 1972 unskilled manual	(3·2)	(3·6)	(2·9)	(2·5)	47	21	22	4
1967 unskilled manual, 1972 skilled manual	(3·9)	(3·6)	(3·0)	(2·9)	35	16	15	4
1967 unskilled manual, 1972 managerial/non-manual	(3·2)	(4·7)	(2·9)	—	10	2	7	1
Religion								
Husband and wife Christian but not Catholic	3·4	3·7	3·3	(2·6)	256	106	115	35
Wife Catholic, husband other Christian	(3·0)	(3·0)	(2·9)	(3·3)	22	9	10	3
Husband Catholic, wife other Christian	(3·4)	(3·9)	(3·2)	—	20	6	14	—
Husband and wife Catholic	(2·9)	(3·2)	(2·6)	(2·6)	30	13	12	5
Husband and wife non-Christian	(3·5)	(4·1)	(3·4)	(2·8)	24	7	11	6
Other combinations	(4·5)	(5·0)	(3·3)	—	12	8	4	—
Age completed full-time education								
Husband 15 or below, wife 15 or below	3·2	3·5	3·2	(2·5)	209	88	88	33
Husband 15 or below, wife 16–19	(4·2)	(4·5)	(3·7)	—	38	21	16	1
Husband 15 or below, wife 20 or more	(5·2)	—	—	—	2	1	1	—
Husband 16–19, wife 15 or below	(3·5)	(4·3)	(3·3)	(1·5)	30	12	14	4
Husband 16–19, wife 16–19	(3·3)	(3·0)	(3·5)	(3·6)	43	17	20	6
Husband 16–19, wife 20 or more	(3·1)	(4·5)	(1·7)	—	4	2	2	—
Husband 20 or more, wife 15 or below	(4·4)	—	—	—	2	1	1	—
Husband 20 or more, wife 16–19	(2·6)	(3·2)	(2·2)	(3·3)	20	4	12	4
Husband 20 or more, wife 20 or more	(3·5)	(4·2)	(3·6)	—	9	3	5	1

where the husband was in manual (particularly non-skilled) occupations and all intervals were shorter where the couple were both Catholic or where the husband was Catholic. Where the wife but not the husband was Catholic, the intervals were longer, on average, than for other groups. At that time, the data for the 1960–67 marriages were based on relatively few births and hence less reliable. The data collected in 1972 provide a basis for investigating whether these associations were maintained for the 1960–67 marriages or whether they were subject to change.

For ease of interpretation, the data have been analysed separately for the first and second intervals since tables 4.6 and 4.8 are too detailed to illuminate any systematic relationships. These data are given in table 4.9.

Table 4.9 *Women married 1960–67*
Mean number of years between live births (analysed by date of marriage and some socio-economic variables)

	Marriage: 1st live birth							
	Date of marriage				*Number of women with first births married*			
	All dates	*1960–61*	*1962–64*	*1965–67*	*All dates*	*1960–61*	*1962–64*	*1965–67*
All women	2·0	2·4	2·0	1·7	1,253	343	561	384
Age completed full-time education								
Husband 15 or below, wife 15 or below	1·8	2·2	1·8	1·4	624	186	268	170
Husband 15 or below, wife 16–19	2·3	(2·6)	2·4	1·9	161	47	68	46
Husband 15 or below, wife 20 or more	(3·3)	(2·3)	(4·0)	(4·1)	9	4	3	2
Husband 16–19, wife 15 or below	2·1	(2·7)	2·1	(1·5)	141	32	68	41
Husband 16–19, wife 16–19	2·4	2·4	2·4	2·3	186	50	86	50
Husband 16–19, wife 20 or more	(2·5)	(3·5)	(2·3)	(2·2)	21	4	13	4
Husband 20 or more, wife 15 or below	(2·8)	(4·2)	(2·0)	—	9	3	5	1
Husband 20 or more, wife 16–19	(1·7)	(1·7)	(1·7)	(1·7)	36	5	20	11
Husband 20 or more, wife 20 or more	(1·9)	(1·3)	(1·8)	(2·3)	34	7	13	14
Husband's socio-economic group 1972								
Managerial	2·2	2·4	2·2	2·1	286	88	130	68
Non-manual	2·2	2·8	2·1	1·8	267	71	107	89
Skilled manual	1·9	2·2	1·9	1·6	507	115	247	144
Other manual	1·9	2·2	2·0	(1·5)	192	68	77	47
Religion								
Husband and wife Christian but not Catholic	2·1	2·5	2·1	1·7	908	258	403	247
Wife Catholic, husband other Christian	1·6	(1·2)	(1·8)	(1·7)	66	16	30	20
Husband Catholic, wife other Christian	1·6	(2·4)	(1·4)	(1·5)	57	10	30	17
Husband and wife Catholic	2·1	(2·1)	(2·4)	(1·7)	76	22	32	21
Husband and wife non-Christian	1·6	(1·7)	(1·6)	(1·4)	86	24	37	25
Other combinations	2·0	(2·5)	(1·8)	(1·8)	60	13	29	18
	1st–2nd live births							
All women	2·6	2·7	2·5	2·5	999	298	465	235
Age completed full-time education								
Husband 15 or below, wife 15 or below	2·6	2·7	2·6	2·6	659	156	220	122
Husband 15 or below, wife 16–19	2·6	2·8	2·3	(2·9)	125	43	53	29
Husband 15 or below, wife 20 or more	(3·0)	(2·4)	(4·3)	—	7	4	2	1
Husband 16–19, wife 15 or below	2·7	(2·9)	2·7	(2·6)	106	28	53	25
Husband 16–19, wife 16–19	2·4	(2·4)	2·5	(2·4)	158	45	78	30
Husband 16–19, wife 20 or more	(2·2)	(2·4)	(2·4)	(1·6)	16	3	10	3
Husband 20 or over, wife 15 or below	(3·1)	(3·9)	(2·7)	—	9	3	5	1
Husband 20 or over, wife 16–19	(1·8)	(2·7)	(1·4)	(2·4)	32	5	20	7
Husband 20 or over, wife 20 or more	(2·1)	(2·1)	(2·2)	(2·0)	29	7	11	11
Husband's socio-economic group 1972								
Managerial	2·5	2·8	2·4	(2·3)	242	82	113	47
Non-manual	2·7	3·1	2·5	2·7	203	60	87	56
Skilled manual	2·6	2·6	2·6	2·6	402	99	205	97
Other manual	2·4	2·5	2·4	(2·2)	151	56	60	35
Religion								
Husband and wife Christian but not Catholic	2·6	2·7	2·5	2·7	725	225	337	163
Wife Catholic, husband other Christian	2·5	(3·0)	(2·3)	(2·1)	51	14	25	12
Husband Catholic, wife other Christian	(2·4)	(2·0)	(2·7)	(2·0)	46	10	24	12
Husband and wife Catholic	2·2	(2·5)	(1·8)	(2·4)	61	19	27	14
Husband and wife non-Christian	2·5	(2·9)	(2·5)	(2·1)	73	19	31	23
Other combinations	(2·8)	(3·0)	(2·8)	(2·6)	43	11	21	11

Though again differences were small, the wife's educational level was inversely related to the average length of the *second* internatal interval. Women who completed their education at 16 years or above had shorter second intervals, on average, than those who completed their education younger. Shorter average *first* intervals were found where both husband and wife completed their education at 15 years or below and, in the earlier marriage cohorts, where the husband completed his education at 20 or older and the wife at 16 years of age or older.

For the group as a whole, the mean length of the first internatal interval for couples where the husband was in a manual occupation was marginally shorter than for managerial and non-manual groups. Though this situation was maintained for all cohorts illustrated in table 4.9, the differences varied in degree. Of those married in 1960–61, couples with a husband in a non-manual (but not a managerial) occupation had a considerably longer first interval, on average, than the manual groups. Differences were much smaller for the marriages which took place in 1962–64 (when all intervals declined, particularly for the 1962–63 cohort) but had increased for the 1965–67 cohort where the short average intervals experienced by couples with husbands in manual occupations were associated with a relatively higher proportion of women who had had a first child (87–88 per cent, 82 per cent for non-manual occupations and 80 per cent for managerial occupations). This suggests that couples with husbands in non-manual and managerial occupations use changes in the timing of child-bearing as a means of adjusting to economic circumstances. Couples with husbands in manual occupations were less flexible.

The mean length of the second interval was also relatively long for couples with husbands in non-manual (but not managerial) occupations, particularly for the 1960–61 cohort and for the 1965–67 cohort. Couples with husbands in skilled manual occupations had similar mean lengths for the second interval but these did not vary from cohort to cohort. Where the husband was in a managerial occupation, the second internatal interval was relatively long for the 1960–61 cohort but relatively short for the 1965–67 cohort, even though 55 per cent of the managerial group in the 1965–67 cohort, compared with 57 per cent of all 1960–67 marriages, had had at least two children.

Differences in first interval lengths between religious groups were not consistent. Catholic couples tended to have a shorter than average *second* internatal interval, but the data on religion do not clearly support the 1967 finding of an association between the length of the first internatal interval and religious affiliation.

4.4 **Patterns of family building and family size**

Most studies, including the 1967 study on which the present follow-up is based, demonstrate an inverse relationship between the length of internatal intervals and measures of family size, whether actual, desired or expected. However, single cross-sectional studies, as most were, shed little light on the sequence of events which lead to this association: whether, expecting a relatively large number of children, a woman reduces the length of time that passes between the early births in order to be sure of achieving the number of children she wants or she does so in order not to greatly extend the child-bearing period or whether, experiencing short intervals between the early births, a woman concludes that she is likely to have a relatively larger number of children. The present study, because it incorporates details of events at two points in time, throws some light on the direction of the relationship. Before discussing this in greater detail, three tables (tables 4.10, 4.11 and 4.12) illustrate, again, the relationship between interval length and family size using the data collected in 1972 on interval length and in 1967 and 1972 on actual and expected family size.

Table 4.10 *Women married 1960–67*
Lengths of intervals between live births (analysed by date of marriage and number of live births in 1972)

Date of marriage and number of liveborn children in 1972	*Total number of married women*	*Mean number of years*					*Percentage of all women in cohort*
		Marriage–1st	*1st–2nd*	*2nd–3rd*	*3rd–4th*	*Marriage–parity*	%
All dates							
1	251	3·2	—	—	—	3·2	18
2	638	2·0	2·8	—	—	4·8	46
3	262	1·3	2·3	3·0	—	6·6	19
4	85	0·9	1·9	2·3	2·7	7·8	6
							Base = 1,384
Married 1960–61							
1	44	(3·9)	—	—	—	(3·9)	12
2	151	2·9	3·1	—	—	6·0	41
3	95	1·7	2·5	3·1	—	7·3	26
4	42	(0·9)	(2·0)	(2·6)	(3·2)	(8·7)	12
							Base = 365
Married 1962–64							
1	95	3·4	—	—	—	3·4	16
2	300	2·0	2·8	—	—	4·8	50
3	126	1·3	2·1	3·1	—	6·5	21
4	35	(0·9)	(1·8)	(2·1)	(2·4)	(7·2)	6
							Base = 606
Married 1965–67							
1	112	2·8	—	—	—	2·8	27
2	187	1·4	2·6	—	—	4·0	45
3	41	(0·5)	(2·3)	(2·4)	—	(5·2)	10
4	8	(1·0)	(1·2)	(1·9)	(1·6)	(5·7)	2
							Base = 413

Table 4.11 *Women married 1960–67*
Lengths of intervals between live births (analysed by date of marriage and most likely number of children expected in 1967[1])

Date of marriage and most likely number of children expected in 1967	*Mean number of years*				*Number of women with*			
	Marriage–1st	*1st–2nd*	*2nd–3rd*	*3rd–4th*	*1*	*2*	*3*	*4*
					live births in 1972			
All dates								
0	(5·6)	(2·4)	(1·3)	—	34	11	2	—
1	2·1	3·8	(2·5)	—	108	54	10	—
2	2·2	2·7	3·1	(3·2)	667	531	99	14
3	1·6	2·3	2·8	(1·5)	295	261	149	35
4	1·3	1·9	2·3	(2·2)	99	96	66	34
Married 1960–61								
0	(8·9)	—	—	—	7	1	—	—
1	2·6	4·3	(2·5)	—	96	16	5	—
2	2·7	3·0	(3·6)	(4·8)	161	141	27	5
3	1·7	2·3	2·8	(3·2)	100	97	75	20
4	1·4	2·2	(2·0)	(2·5)	30	30	28	18
Married 1962–64								
0	(5·5)	(2·6)	—	—	18	6	1	—
1	2·0	(4·2)	(2·5)	—	147	25	5	—
2	2·2	2·6	3·3	(2·6)	315	264	53	7
3	1·4	2·3	2·6	(2·8)	106	100	58	11
4	1·4	1·5	(2·5)	(1·9)	47	46	33	16
Married 1965–67								
0	(3·1)	(2·6)	—	—	9	4	1	—
1	1·8	(2·5)	—	—	81	13	—	—
2	1·8	2·6	(2·0)	(1·2)	191	126	19	2
3	1·6	2·5	(3·0)	?	89	64	16	4
4	(1·0)	(2·4)	(2·1)	—	22	20	5	—

[1] 1972 definition.

Table 4.12 *Women married 1960–67*

Lengths of intervals between live births (analysed by date of marriage and most likely number of children expected in 1972)

Date of marriage and most likely number of children expected in 1972	*Mean number of years*				*Number of women with*			
	Marriage–1st	*1st–2nd*	*2nd–3rd*	*3rd–4th*	*1*	*2*	*3*	*4*
					live births in 1972			
All dates								
1	2·8	(2·2)	—	—	120	3	1	—
2	2·3	2·8	(3·0)	(2·7)	631	517	11	2
3	1·6	2·5	2·9	(4·2)	353	335	206	6
4	1·1	1·9	2·7	2·5	109	108	100	62
Married 1960–61								
1	(3·7)	(1·8)	—	—	34	2	—	—
2	2·8	3·1	(3·7)	—	142	129	6	1
3	2·1	2·7	2·8	(4·5)	106	105	77	5
4	(1·0)	(2·0)	(3·2)	(2·8)	41	41	41	28
Married 1962–64								
1	2·6	—	—	—	53	1	1	—
2	2·4	2·7	(2·1)	—	296	258	5	1
3	1·5	2·5	3·0	—	150	146	98	1
4	1·0	1·7	(2·6)	(2·4)	51	51	49	29
Married 1965–67								
1	(2·2)	—	—	—	33	—	—	—
2	1·9	2·6	—	—	193	129	—	—
3	1·2	2·5	(2·5)	—	97	84	31	—
4	(1·4)	(1·9)	(1·7)	(1·4)	17	16	10	5

Table 4.10 shows that, for all durations of marriage, the mean length of each internatal interval declined as the number of children liveborn increased. Considering women married between 1960 and 1967 together, women with four children in 1972 took, on average, 0·9 years after marriage to have their first child while women with two children took two years. Similarly, the mean length of the second internatal interval varied from 1·9 years to 2·8 years for women with four and two children, respectively, in 1972. For these women, as a group, those with two children had taken 4·8 years, on average, after marriage to achieve this parity, those with three had taken, on average, 6·6 years to reach three while four children had been reached at an average interval of 7·8 years after marriage. Comparisons between the 1960–61 and 1962–64 cohorts—those with approximately similar parity distributions—suggest that the mean time taken to achieve each level of parity declined from the earlier to the later cohort. This was particularly so for women with two children in these cohorts. However, no conclusions can be drawn from these data about the average time likely to be taken to reach each parity for those married 1965–67 since just under one-third of the women had still to have a second child. Evidence from the earlier parts of this chapter would suggest that a continued decline in interval length at the rate experienced by the 1962–64 cohort was unlikely.

To discount the effects of foetal deaths on the relationship between changes in interval length and the number of children liveborn, the analysis was carried out separately for those who had never experienced a wasted pregnancy. The conclusions did not differ greatly from those for the group as a whole.

Data on the relationship between intervals and expected family size are shown in table 4.11 for the number of children expected in 1967 and in table 4.12 for the number expected in 1972. At both dates, the inverse relationship was maintained for almost all intervals and for the different marriage durations. The main exceptions were the second and third intervals for those who, in 1967, expected no or only one child. The mean length of the second interval for those who expected, in 1967, to be childless was, in fact, shorter than for those who expected one child and it followed a relatively long (mean) first interval—it may be that the second birth occurred at an unexpectedly short interval after the experience of a long first interval. In the same way, the mean length of the third internatal interval for those who expected no or one child in 1967 was shorter than the interval for those who expected two—again following a relatively long second interval. It is possible that their initial expectations were influenced by anxieties about their infecundity which later proved to be groundless. A longer than anticipated first interval may have led women to think that they were relatively infecund and thus to use family planning less consistently or not at all. If they were not in fact infecund, second and third births would occur at unexpectedly short intervals. However, the number of women concerned was very small and too much cannot be made of inferences drawn from this evidence.

The other main point of interest in table 4.11 lies in the similarity of the mean first interval lengths for women who expected one or two children (2·1 and 2·2 years respectively for all marriages between 1960 and 1967) and the difference from those who expected three or four children in 1967 (1·6 and 1·3 years, respectively). This will be discussed further in relation to table 4.14 which shows the relationship between the number of children expected in 1967, the number born by 1972 and interval lengths.

Table 4.12, illustrating the mean lengths of the internatal intervals in relation to the number of children the women expected in 1972, again shows some exceptions based on very few cases, where a short second or third interval was

Table 4.13 *Women married 1960–67*
Lengths of intervals between live births (analysed by date of marriage and changes in number of children expected 1967–72)

	Mean number of years				*Number of women with*			
	Marriage–1st	*1st–2nd*	*2nd–3rd*	*3rd–4th*	*1*	*2*	*3*	*4*
					live births in 1972			
All dates	2·0	2·6	2·8	2·6	1,253	999	350	96
Same number expected	2·0	2·5	2·7	(2·1)	688	563	140	27
1972 exceeds 1967 by one	1·8	2·8	3·0	(3·1)	247	215	124	41
1972 exceeds 1967 by two or more	2·9	2·6	(2·5)	(2·2)	70	59	40	17
1972 is below 1967 by one	2·3	2·5	(2·4)	—	167	102	23	1
1972 is below 1967 by two or more	(1·9)	(2·1)	(1·6)	(2·6)	39	24	8	3
Unclassified	(1·7)	(2·6)	(3·4)	(2·1)	42	36	18	7
Married 1960–61	2·4	2·7	2·8	3·0	344	299	145	50
Same number expected	2·1	2·7	2·6	(2·2)	198	173	68	14
1972 exceeds 1967 by one	2·3	2·6	(3·1)	(3·5)	74	69	47	27
1972 exceeds 1967 by two or more	(3·1)	(3·1)	(2·9)	(2·6)	21	19	15	5
1972 is below 1967 by one	(3·5)	(2·8)	(1·8)	—	36	25	6	—
1972 is below 1967 by two or more	(1·7)	(2·8)	(1·5)	—	5	3	3	1
Unclassified	(2·2)	(2·7)	(3·7)	(2·6)	10	10	6	3
Married 1962–64	2·0	2·5	2·8	(2·3)	561	465	160	38
Same number expected	2·0	2·3	2·5	(2·1)	308	266	62	13
1972 exceeds 1967 by one	1·6	2·9	3·2	(2·6)	112	101	58	11
1972 exceeds 1967 by two or more	(3·3)	(2·7)	(2·6)	(2·2)	32	24	17	9
1972 is below 1967 by one	2·1	(2·3)	(2·8)	—	64	37	12	—
1972 is below 1967 by two or more	(2·4)	(2·1)	(1·7)	—	20	15	3	1
Unclassified	(1·6)	(2·7)	(3·4)	(1·7)	25	22	8	4
Married 1965–67	1·7	2·5	(2·3)	(1·6)	348	235	45	8
Same number expected	1·7	2·7	(3·8)	—	182	124	10	—
1972 exceeds 1967 by one	1·6	(2·6)	(2·0)	(1·5)	61	45	19	3
1972 exceeds 1967 by two or more	(2·1)	(1·8)	(1·7)	(1·5)	17	16	8	3
1972 is below 1967 by one	1·9	(2·4)	(2·1)	—	67	40	5	1
1972 is below 1967 by two or more	(1·4)	(1·7)	(1·8)	—	14	6	2	1
Unclassified	(1·3)	(2·0)	—	—	7	4	1	—

experienced when only one or two children were expected. In almost all cases, the smaller number of children expected in 1972 was the result of the death of children. Apart from these instances, the negative relationship held but there were differences between marriage cohorts which reflected the changes occurring in the intervals between live births. For the 1965–67 cohort, the mean length of the first interval for those who expected four children in 1972 was longer than that for the earlier marriage cohorts (though based on only 17 cases). Similarly, the mean lengths of the second interval for those who expected two and certainly three and four children in this cohort will ultimately be longer than the same interval for those who had comparable expectations in the earlier cohorts. That is, those in the most recent cohorts who expected three or four children were no longer likely to concentrate their period of child-bearing to the same extent as the earlier cohorts.

There was, however, no systematic pattern of interval lengths with respect to changes in expectations between 1967 and 1972 (table 4.13). Whereas the initial assumption might be that short internatal intervals were likely to be associated with an increase in the number of children expected—that is, accidental pregnancies at short intervals would lead to an increase in the number of children expected or alternatively a positive desire to have more children would lead to an adjustment of the intervals between births resulting in shorter intervals. In fact, the shortest mean first intervals for all those married between 1960 and 1967 seemed to be associated with both those who expected one more child in 1972 than they had done in 1967 and those who, in 1972, expected two fewer children. Conversely, longer mean first intervals were characteristic of those whose expectations had increased by two or more in 1972 or had fallen by one. However, if those whose expectations had changed by two or more children are ignored since the data are based on small numbers, the longest mean first interval for all marriage cohorts was associated with women who, in 1972, expected one fewer child than they had done in 1967; possibly the longer interval implied some fecundity impairment which brought about a revision in the number of children expected or the choice of fewer children was reflected in the longer first interval. It is difficult to discern any pattern which would suggest any explanation of the changes in the mean lengths of the second and higher order intervals in relation to the changes in the number of children expected.

A more fruitful source of evidence about the likely sequence of events is the relationship between the number of children expected in 1967, the number actually achieved by 1972 and interval length. This is illustrated in table 4.14 for the first and second internatal intervals and for the interval between marriage and the second live birth. As expected from the earlier tables, the mean lengths of the intervals measured declined as the number of liveborn children increased, with some exceptions. However, for parities of two, particularly, and of three and four, the mean length of the interval was shorter for those who expected a larger rather than a smaller number of children in 1967, even though, by 1972, that number of children had not been achieved. Thus, those who had expected three or four children in 1967 but had only two five years later experienced shorter first and second intervals, on average, than those who had initially expected two. Conversely, those who had expected two children in 1967 but had had three by 1972 had longer intervals, on average, than those who had originally expected three children. The third measure summarises these patterns: the mean length of interval between marriage and the second live birth decreased, at parities of two, three and four respectively, as the number of children expected in 1967 increased and those who initially expected a larger number of children experienced a shorter interval even though that number had not been achieved.

In 1967, three-quarters of the women had already had at least one child so that,

Table 4.14 *Women married 1960–67*

Lengths of intervals between live births (analysed by number of children expected in 1967 and number of liveborn children in 1972)

Number of children liveborn in 1972	*Most likely number of children expected in 1967*						*Most likely number of children expected in 1967*					
	All numbers	*0*	*1*	*2*	*3*	*4*	*All numbers*	*0*	*1*	*2*	*3*	*4*
	Mean number of years between marriage and 1st live birth						*Number of women with one or more liveborn children*					
1	3·2	(6·4)	1·9	3·3	(2·8)	(3·6)	251	23	54	134	33	3
2	2·0	(4·4)	(2·4)	2·0	1·8	(1·8)	635	9	43	425	108	28
3	1·3	(1·5)	(2·1)	1·4	1·2	(1·2)	262	2	11	90	116	31
4 or more	1·0	—	—	(1·2)	(0·8)	(0·9)	102	—	—	16	37	37
	Mean number of years between 1st and 2nd live births						*Number of women with two or more liveborn children*					
2	2·8	(2·4)	(3·8)	2·8	2·6	(2·6)	635	9	43	425	108	28
3	2·3	(2·6)	(3·8)	2·4	2·2	(1·7)	262	2	11	90	116	31
4 or more	1·8	—	—	(2·2)	(1·9)	(1·6)	102	—	—	16	37	37
	Mean number of years between marriage and 2nd live birth						*Number of women with two or more liveborn children*					
2	4·8	(6·8)	(6·2)	4·8	4·4	(4·3)	635	9	43	425	108	28
3	3·6	(4·1)	(5·9)	3·8	3·4	(2·9)	262	2	11	90	116	31
4 or more	2·7	—	—	(3·3)	(2·7)	(2·5)	102	—	—	16	37	37

in stating the number of children they expected to have altogether, most women would have known how long after marriage their first child had been born and this may have influenced their expectations. However, only a third of the women had had a second child in 1967 and yet the mean length of the *second* interval (experienced by almost three-quarters of the women by 1972) was in most cases also inversely related to the number of children expected in 1967. Since most of the second births had taken place after the 1967 interview when the number of children expected was initially stated, this suggests that these expectations had some influence on the length of the subsequent interval. Rather than the lengths of the intervals experienced leading to a considered view of the number of children they might expect, it would seem that the number of children women initially expected, whether achieved or not, resulted in a particular length of second interval and probably in a particular length of first interval. And the greater the number of children expected, the shorter the average length of these intervals.

The main exceptions to this association were those who, in 1967, expected one child: those who expected one child in 1967 and had one in 1972 had had it at a shorter interval, on average, than those who had originally expected a larger number. The remaining exceptions were based on very small numbers and illustrated the unusual circumstances of those who expected no children in 1967 but five years later had had between one and three, sometimes at shorter average intervals than those who had expected more children.

4.5 **Infecundity, family planning and birth intervals**

As in the previous chapter, infecundity was assessed by asking the women their opinions about their future fecundity in 1967 and again in 1972. Information on the changes in family planning usage was obtained in detail for the five years prior to the 1972 interview. However, only the summaries of this information are included in this section. These illustrate the number of contraception techniques used and whether they were used consistently or whether the couple 'took chances' during this period. 'Techniques' refer to either a single method of family planning or two or more methods which were used in combination or as alternatives over a particular period of time.

Table 4.15 *Women married 1960–67*

Percentage of women who have *not* had two live births within five years of marriage and mean number of years between marriage and second live birth for those with at least two live births, for future fecundity categories in 1967 (analysed by two/three or more live births in 1972)

Future fecundity in 1967	*Number of women in fecundity group*	*Percentage without two live births in five years*	*Mean number of years between marriage and second live birth*		*Number of women with*	
			Those with two live births	*three or more live births*	*two live births*	*three or more live births*
		%				
Impaired fecundity	159	85	5·6	(4·6)	58	28
Fecund with past difficulties	109	71	5·4	(3·7)	58	31
Fecund	1,100	59	4·7	3·2	519	304
All groups	1,384	63	4·8	3·4	639	365

Table 4.16 *Women married 1960–67*

Percentage of women who have *not* had two live births within five years of marriage and mean number of years between marriage and second live birth for those with at least two live births, for future fecundity categories in 1972 (analysed by two/three or more live births in 1972)

Future fecundity 1972	*Number of women in fecundity group*	*Percentage without two live births in five years*	*Mean number of years between marriage and second live birth*		*Number of women with*	
			Those with two live births	*three or more live births*	*two live births*	*three or more live births*
		%				
Sterile due to operation/injury	138	41	(4·5)	3·4	44	85
Impaired fecundity	83	75	(3·6)	(3·0)	19	10
Fecund or fecund with past difficulties	1,149	64	4·9	3·3	570	268
All groups	1,384	63	4·8	3·4	639	365

Whether impaired fecundity led to a delay in births or whether a delay in births led women to think that their fecundity was impaired was not apparent in 1967. By 1972, when three-quarters of the women had had two children, it seemed that those who had thought in 1967 that they suffered some disability which affected their fecundity were less likely than women in general to have had two children within five years of marriage, and among those with two children, the average length of the interval between marriage and the birth of the second child was longer (5·6 and 5·4 years) than for those unaware of any disability (4·7 years) (table 4.15). This suggests that, in fact, a proportion if not all of these women were affected by some real physical limitation to their fecundity. After five more years of marriage, the relationship between the women's views of their own future fecundity and their family building patterns was not the same. Although proportionately more of the women with impaired fecundity in 1972 had not had two children within five years of marriage, the very small number of those with at least two children had had them at shorter intervals, on average, than the relatively fecund and those completely sterile. Those completely sterile were the group most likely to have had two children within five years of marriage, but at mean intervals not much shorter than those relatively fecund. As pointed out elsewhere, sterility, usually by means of an operation, was undertaken as a consequence of above average and rapid child-bearing.

Table 4.17 *Women married 1960–67*

Percentage of women who have *not* had two live births within five years of marriage (analysed by date of marriage and family planning usage)

		Number of women married			*Percentage of those married who had* not *had two live births within five years of marriage*		
		1960–61	*1962–64*	*1965–67*	*1960–61*	*1962–64*	*1965–67*
					%	%	%
Number of techniques[1] used since previous interview							
One		187	242	126	63	59	73
Two		123	201	162	63	60	64
Three or more		33	130	103	(67)	59	50
Whether always used a method or 'took chances'							
Never used family planning		16	30	14	(75)	(33)	(100)
Did not change technique 1967–72 and	always used method	127	172	86	61	53	70
	sometimes 'took chances'	33	42	24	(61)	(71)	(67)
	insufficient information	15	11	11	(67)	(55)	(100)
Changed technique 1967–72 and	always used method employed at the time	92	186	143	66	61	62
	'always used some', 'took chances' with others	27	73	71	(56)	52	55
	'took chances' with all techniques	13	29	17	(54)	(69)	(71)
	insufficient information	26	46	37	(73)	(63)	(57)

[1] 'Techniques' refer to a single method or a combination of methods which were used either together or inter-changeably over a period of time.

The available data on family planning and family building patterns were even less clear (tables 4.17 and 4.18). Among those with two children, the shortest intervals, on average, were experienced by those who had used only one technique of family planning throughout the five years since the 1967 interview—perhaps, after the birth of their children—and particularly if this one technique was 'always used' (table 4.18). Among those married between 1965 and 1967, this was offset by the relatively high proportion of women (73 per cent) who had not had two children within five years of marriage (table 4.17).

For the 1960–64 marriage cohorts, the lowest proportion without two children born within five years of marriage was found among couples who had changed their contraceptive technique between 1967 and 1972 and had 'taken chances' while using one or more of the techniques but had 'always used' others. This relatively high proportion with two children within five years of marriage was not associated with particularly short mean interval lengths—an average of 4·8 years for those with two children in all cohorts.

Altogether, the mean interval lengths were little different for the different ways in which family planning appeared to have been used in the five years 1967–72. The use of family planning appears to affect family building patterns only to the extent that its use in the early years of marriage reduces the proportion of women who have two children fairly quickly—within five years of marriage.

Obviously these data raise as many questions as they elucidate. An analysis is required of the sequence of births and family planning usage for the different stages of marriage (for different parities, or durations, for example). Although some information was collected in this study the size and nature of the sample were such as to make doubtful the value of such analyses. However, as table 4.19 illustrates, where detailed information of the circumstances of each

Table 4.18 *Women married 1960–67*

Mean number of years between marriage and second live birth analysed by date of marriage and contraception variables)

	Those with two live births							
	Mean number of years between marriage and 2nd live birth women married				*Number of women married*			
	1960–67	*1960–61*	*1962–64*	*1965–67*	*1960–67*	*1960–61*	*1962–64*	*1965–67*
Number of techniques used since previous interview								
One	4·5	5·7	4·2	(3·6)	235	71	120	44
Two	4·9	6·0	5·0	4·1	246	58	111	77
Three or more	5·0	(6·7)	5·5	4·2	144	16	66	62
Whether always used method or 'took chances'								
Never used family planning	(6·3)	(6·6)	(7·1)	(4·9)	7	3	2	2
Did not change technique 1967–72 and always used method	4·4	5·4	4·1	(3·6)	178	50	95	33
Did not change technique 1967–72 and sometimes 'took chances'	(5·3)	(6·6)	(5·0)	(3·5)	40	14	18	8
Did not change technique 1967–72 and insufficient information	(4·5)	(5·6)	(2·8)	(4·8)	14	7	5	2
Changed technique 1967–72 and always used method employed at the time	5·0	(5·9)	(5·3)	(4·0)	226	46	105	75
Changed technique 1967–72 and always used some, 'took chances' with others	4·8	(5·8)	(5·1)	(4·1)	83	11	34	38
Changed technique 1967–72 and 'took chances' with all techniques	(5·0)	(6·7)	(4·7)	(4·9)	33	5	19	9
Changed technique 1967–72 and insufficient information	(4·5)	(7·0)	(5·3)	(3·9)	48	12	19	17
	Those with three or more live births							
Number of techniques used since previous interview								
One	3·3	3·2	3·4	(3·2)	131	72	51	8
Two	3·4	4·2	2·9	(2·4)	134	56	58	20
Three	3·4	(4·5)	3·4	(2·6)	92	17	54	21
Whether always used method or 'took chances'								
Never used family planning	(3·0)	(2·8)	(3·3)	—	5	3	2	—
Did not change technique 1967–72 and always used method	3·1	3·1	(3·1)	(3·2)	90	51	33	6
Did not change technique 1967–72 and sometimes 'took chances'	(3·6)	(3·1)	(4·4)	(2·3)	27	13	11	3
Did not change technique 1967–72 and insufficient information	(4·0)	(4·4)	(2·8)	—	8	6	2	—
Changed technique 1967–72 and always used method employed at time	3·4	(4·3)	3·1	(2·4)	112	40	57	15
Changed technique 1967–72 and always used some, 'took chances' with others	3·2	(3·9)	(3·2)	(2·8)	58	13	31	14
Changed technique 1967–72 and 'took chances' with all techniques	(3·6)	(3·6)	(3·8)	(3·1)	16	8	6	2
Changed technique 1967–72 and insufficient information	(3·5)	(4·5)	(3·2)	(2·6)	40	12	19	9

Table 4.19

Mean number of years between marriage and first liveborn child or between live births occurring between 1967 and 1972 interviews (analysed by parity and circumstances of conception)

	Circumstances of conception				*Number of living children born*			
	After stopped family planning	*Accidentally*	*Before started family planning*	*Born less than 9 months after marriage*	*After stopped family planning*	*Accidentally*	*Before started family planning*	*Born less than 9 months after marriage*
All first children born live since previous interview	4·1	3·1	(2·8)	(0·3)	143	16	33	14
All second children born live since previous interview	3·1	(2·9)	2·4	—	315	48	60	—
All third children born live since previous interview	3·4	3·0	(1·9)	—	79	77	29	—
All fourth children born live since previous interview	[1]	(2·3)	(2·9)	—	15	32	12	—

[1] Not available.

conception was obtained—for live births occurring between 1967 and 1972 to 1960–67 marriages—the mean length of internatal intervals declined for each parity from the highest values for births which had occurred as a consequence of family planning being stopped to have a child, to medium values for accidental conceptions to the shortest values (apart from pre-marital conceptions) for conceptions which had occurred before family planning had been used at all. The only exception related to fourth children born in this period.

4.6 **Opinions on the timing of births**

In order to obtain more information about the circumstances and timing of births, women were asked in detail about all the children still living who were born since the previous interview: that is, the children born approximately between mid-1967 and mid-1972. For each of these children, information was obtained from the wife on the circumstances in which the pregnancy was said to have occurred—whether it was planned, happened accidentally or occurred before family planning was used—and for those children who were not completely unwanted the lengths of time which the women would have preferred between births (or after marriage).

The information is summarised in table 4.20. Altogether 1,160 living children had been born since the previous investigation to the 1,384 women included in

Table 4.20 *Women married 1960–67*
Children born since 1967 interview: circumstances of their birth (analysed by parity and date of marriage)
(Percentage of children)

Circumstances	*All parities*	*Parity*					*Expected births*
		1	*2*	*3*	*4*	*5 or later*	
	%	%	%	%	%	%	%
All dates of marriage							
After deliberately stopped family planning to have child	61	68	74	50	33	41	64
When using a method of family planning which did not work or 'took a chance'	20	7	11	31	44	41	25
Before starting family planning	14	15	14	13	16	12	1
When stopped pill but before adopting other method	1	1	*	2	2	2	—
Other answers	1	1	*	1	2	4	1
No answer	1	1	1	2	4	—	9
Interval less than 9 months after marriage	1	6	—	—	—	—	—
Number of living children born since 1967 interview	1,160	223	469	298	114	56	77
Marriages 1960–64							
After deliberately stopped family planning to have child	61	79	80	52	32	36	52
When using a method of family planning which did not work or 'took a chance'	23	6	9	31	44	44	36
Before starting family planning	12	9	10	12	16	14	3
When stopped pill but before adopting other method	2	—	—	3	2	2	—
Other answers	1	4	—	*	2	4	—
No answer	1	1	1	1	4	—	10
Interval less than 9 months after marriage	—	—	—	—	—	—	—
Number of living children born since 1967 interview	669	67	245	213	94	50	39
Marriages 1965–67							
After deliberately stopped family planning to have child	61	63	67	48	(40)	(83)	76
When using a method of family planning which did not work or 'took a chance'	16	8	13	32	(45)	(17)	13
Before starting family planning	17	18	18	14	(15)	—	—
When stopped pill but before adopting other method	1	1	1	—	—	—	—
Other answers	1	—	*	2	—	—	3
No answer	1	1	1	4	—	—	8
Interval less than 9 months after marriage	3	9	—	—	—	—	—
Number of living children born since 1967 interview	491	156	224	85	20	6	38

Table 4.21 *Women married 1960–67*

Unplanned children born since 1967 interview: the proportion of children wanted or not at the time of birth (analysed by parity)

Whether wanted or not	*All parities*		*Parity*										*Expected births*	
			1		*2*		*3*		*4*		*5 or later*			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
All unplanned children	420	100	55	100	119	100	141	100	72	100	33	100	21	100
Wife wanted or didn't mind child at that time	224	53	45	82	77	65	60	43	29	40	13	(39)	7	(33)
Wife wanted child but *not* at that time	70	17	9	16	25	21	25	18	10	14	1	(3)	1	(5)
Wife did not want child at all	126	30	1	2	17	14	56	40	33	46	19	(58)	13	(62)
Of those born since 1967 interview, percentage 'not wanted at all'		11		*		4		19		29		34		17

the investigation. Of these births, 61 per cent were said to have been deliberately planned, 20 per cent occurred when contraception was said to have failed or the couple took a chance while 14 per cent occurred to couples before they said they had used any method of conception control. The proportion of births said to have occurred accidentally rose sharply for third and higher order parities so that, for fourth children, 44 per cent of the conceptions were said to be accidental compared with the 33 per cent which were deliberately planned. Women who were currently pregnant in 1972 were also asked about the circumstances of conception and 64 per cent said that it was planned while 25 per cent were accidental. Accidental conceptions both of living children and to women currently pregnant were claimed to be more frequent by those married between 1960 and 1964 than by those married later.

Of the 420 children who were said not to have been deliberately planned, about half (53 per cent) were said to have been wanted at the time or, at least, the women said they did not mind having a child at that time. A further 17 per cent were said to be wanted but preferably at some other time and 30 per cent were not wanted at all. Not surprisingly, the proportion unwanted altogether increased sharply for third and higher order children. Percentaged out of all those born between the two interviews, 19 per cent of third children were 'not wanted at all' compared with 4 per cent of second children while for fifth children the proportion rose to 34 per cent (table 4.21).

However, the main interest for this section lies in those who deliberately planned their children and those who wanted a child either at the time it was born or at some other time. Table 4.22 illustrates the women's opinions about the intervals they experienced. Sixty per cent of the intervals which resulted from deliberate planning or where the couple did not mind a child at that time were said to be the length wanted. Of the remainder, the majority would have preferred a *shorter* interval. Variations according to parity were small. Opinions about the length of the preferred interval centred around 19–24 months and 31–36 months for almost all parities. A higher proportion of fourth and fifth births would have been preferred between 13 and 24 months after the births of the previous children.

4.7 The ages of wives at the completion of their families

Data were also collected on the ages at which the women implied that they would complete their families. For women expecting no more children this was taken to be their age at the birth of their last child. For those expecting children after the 1972 interviews, answers to the question 'How old do you think you will be when you have your last child?' were regarded as the age at which the wife expected to complete her family.

Table 4.22 *Women married 1960–64*

Children born since 1967 interview: the number and proportion of intervals whose lengths were wanted and the number and proportion of alternative lengths preferred (analysed by parity)

	All parities		*Parity*										*Expected births*	
			1		*2*		*3*		*4*		*5 or later*			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
(A) Born after parents deliberately stopped family planning or wanted/didn't mind child at that time														
Interval wanted	561	60	126	64	262	62	117	55	37	55	20	(57)	26	(46)
Would have preferred shorter ·interval	325	35	62	32	147	35	83	39	23	34	10	(29)	20	(35)
Would have preferred longer interval	32	3	6	3	10	2	10	5	4	6	2	(6)	—	—
Don't know	16	2	2	1	5	1	2	1	4	6	3	(9)	11	(19)
Total number of children/intervals	933	100	196	100	423	100	211	100	67	100	36	100	56	100
(B) Would have preferred shorter/longer interval or child wanted but *not* at that time														
Number of months after birth of previous child would have preferred														
0–8	16	4	2	3	7	4	6	5	1	(3)	—	—	1	(5)
9–12	42	10	8	11	21	12	8	7	4	(11)	1	(8)	—	—
13–18	44	10	7	9	18	10	11	9	6	(16)	2	(15)	1	(5)
19–24	171	40	25	33	81	44	41	35	17	(46)	7	(54)	6	(29)
25–30	29	7	1	1	12	7	14	12	2	(5)	—	—	3	(14)
31–36	71	17	18	24	25	14	23	20	3	(8)	2	(15)	6	(29)
37–42	3	1	1	1	—	—	—	—	2	(5)	—		—	
43–48	24	6	4	5	11	6	8	7	—		1	(8)	2	(10)
49–54	1	*	—	—	1	1	—	—	—		—	—	1	—
55–60	16	4	8	11	3	2	4	3	1	(3)	—	—	—	—
61 or longer	2	*	1	1	1	1	—	—	—		—	—	—	—
No answer	8	2	1	1	2	1	3	3	1	(3)	1	(8)	—	—
Total number of children/intervals	427	100	77	100	182	100	118	100	37	100	13	100	21	100

To a considerable extent the ages at which women complete or expect to complete their families are a function of the ages at which they marry so that variations in the age of completion reflect changing marriage patterns as well as changes in family building patterns. Nevertheless, the measure has been used as an indication of the upper age by which women would contemplate having a child.

In 1967, as table 4.23 illustrates, half the interviewed women who married under 20 years of age expected to complete their families before they were 26; almost all envisaged an end to child-bearing by the age of 30. Again, almost all of those

Table 4.23 *Women married 1960–67*

Percentage distribution of wife's age at which family said to be completed in 1967 (analysed by wife's age at marriage)

Wife's age at which family said to be completed in 1967	*Wife's age at marriage*		
	Below 20	*20–24*	*25 or over*
	%	%	%
Up to and including 25	53	13	—
26–29	23	42	9
30	4	15	8
31–34	2	12	28
35–39	1	*	28
40 or over	—	—	5
Dont't know/no answer	17	17	23
Base	406	761	217

Table 4.24 *Women married 1960–67*

Percentage distribution of wife's age at which family said to be completed in 1972 (analysed by wife's age at marriage and date of marriage)

Wife's age at which family said to be completed in 1972	*Wife's age at marriage*											
	Under 20				*20–24*				*25 or over*			
	Date of marriage											
	All dates	*1960–61*	*1962–64*	*1965–67*	*All dates*	*1960–61*	*1962–64*	*1965–67*	*All dates*	*1960–61*	*1962–64*	*1965–67*
	%	%	%	%	%	%	%	%	%	%	%	%
Up to and including 25	58	44	62	64	24	16	23	33	1	—	1	2
26–29	23	35	21	16	36	36	40	32	16	16	14	19
30	6	3	4	11	10	12	8	10	11	12	15	4
31–34	3	7	1	3	15	18	14	12	32	28	34	32
35–39	2	5	2	2	6	10	6	4	24	31	20	14
40 or over	*	—	1	—	1	1	1	—	6	4	7	7
Don't know/no answer	7	5	10	5	8	6	8	10	10	10	8	13
Mean age	24·6	26·0	24·0	24·3	28·0	29·3	28·2	26·7	32·9	33·2	32·9	32·7
Base	406	101	188	117	761	209	317	234	217	54	101	62

married between 20 and 24 years of age expected, in 1967, to finish child-bearing at 34. For 28 per cent of those who married at 25 or above, child-bearing was expected to extend over a period of up to 15 years. Perhaps it should also be pointed out that when interviewed in 1967, a considerable proportion of those women married between 1960 and 1967 felt unable to give an answer to this question, particularly if they had married late. By 1972, the proportion unable to set an age for the end of their child-bearing was considerably reduced, but even then, this proportion was higher than for most questions dealing with fertility behaviour (table 4.24).

Overall, opinions about the ages at which women thought they would have their last child differed little between 1967 and 1972 for those who had married before 20. For those who had married at 25 or over, the 1972 distribution showed, perhaps, an increased concentration of the end of child-bearing at the younger ages—even allowing for the disproportionate 'no answer' categories—and a corresponding reduction in the proportion expecting to complete their families between 35 and 39 years of age. For those who married between 20 and 24 years of age—the largest group, numerically—the distribution in 1972 showed both a concentration at the younger ages (below 26) and at 31 or over for the completion of families. The extent to which this could be attributed to changes in the number of children expected is discussed below.

In 1972, women married more recently below the age of 25 seemed to expect to complete their families at younger ages than those married earlier. Those married between 20 and 24 years of age in 1965–67 for example expected to complete their families at an average age of 26·7 years compared with the 29·3 years for those who married at the same age in 1960–61. There was little change over the marriage cohorts for women who married at 25 years or over; all expected to complete their families at 33 years of age.

As well as inspecting the overall changes between 1967 and 1972 in the ages at which women expected to complete their families, the changes for individual women were investigated.

Summary data are presented in tables 4.25 and 4.26. For women below 20 there was a decline, on average, in the ages at which families were said to be completed in 1972 compared with 1967. Those who, in 1967, expected to complete their

Table 4.25 *Women married 1960–67*

Mean age (wife's) at which family said to be completed in 1972 for age of completion given in 1967 (analysed by wife's age at marriage)

Age at which family said to be completed in 1967	*Mean age at completion 1972*			*Number of women*		
	Wife's age at marriage					
	Below 20	*20–24*	*25 or over*	*Below 20*	*20–24*	*25 or over*
Up to and including						
25	23·7	25·4	—	216	102	—
26	(26·3)	26·2	—	40	81	—
27	(26·3)	28·1	(28·5)	26	82	3
28	(25·7)	28·1	(30·0)	17	83	5
29	(27·9)	28·9	(30·3)	10	71	11
30	(25·4)	29·0	(30·9)	17	83	18
31	(25·0)	(30·4)	(31·4)	2	39	21
32	(26·0)	(30·0)	(29·3)	4	35	9
33 or over	(30·2)	(30·1)	34·5	6	58	100

families at 27 years of age or older, said in 1972 that they would be marginally younger, on average, when their last child was born. Even though numbers in the individual sub-groups were few, the trend was exhibited by all the groups. Though differences for those who married between 20–24 years of age were small, there is a suggestion that those who in 1967 opted for the very low ages had had to increase them, on average, by 1972 while there was a tendency in the opposite direction for those who had originally thought that they would not complete their families below 30 years of age. Those who married at 25 or over had, on the whole, increased the ages at which they expect to complete their families: those who originally said that they would be 27 at the birth of their last child thought, in 1972, that this would occur when they were, on average, 28·5 years of age while those who thought 31 years of age likely in 1967 said 31·4 years on average in 1972. Only those who suggested an age of 32 and perhaps older in 1967 indicated a possible reduction by 1972. Thus the changes had been a decrease in the age at which families were expected to be completed by those who had married young, both an increase and a decrease for those married between 20 and 24 and an increase for those married at 25 or over.

Table 4.26 *Women married 1960–67*

Mean age (wife's) at which family said to be completed in 1972 for age of completion given in 1967 (analysed by changes in the most likely number of children expected)

Age at which family said to be completed in 1967	*Mean age at completion 1972: changes in number of children expected 1967–72*			*Number of women: changes in number of children expected in 1967–72*		
	Expected same number	*Expected greater number in 1972*	*Expected fewer in 1972*	*Expected same number*	*Expected greater number in 1972*	*Expected fewer in 1972*
Up to and including						
25	23·5	26·5	(22·5)	179	97	32
26	26·2	(28·0)	(23·0)	74	27	17
27	27·0	(31·4)	(24·3)	70	25	15
28	26·8	(30·7)	(25·9)	56	27	19
29	28·8	(30·6)	(28·4)	52	18	20
30	29·1	(30·4)	(26·5)	56	21	33
31	(30·7)	(33·1)	(28·8)	39	7	14
32	(29·2)	(30·6)	(28·7)	24	8	15
33	(32·3)	(32·0)	(28·0)	12	3	11
34	(33·5)	(38·5)	(30·4)	13	3	6
35 or over	(34·2)	(36·5)	(31·9)	46	17	42

Certainly some of the changes in the ages at which women expected to complete their families could be attributed to changes in the number of children expected, as table 4.26 shows. Where women expected the same number of children in 1972 as they had done in 1967, the ages at which women had expected to have their last child were similar: those who thought in 1967 that they would finish childbearing at 26, thought that they would do so at an average of 26·2 years in 1972, those who thought 27 in 1967 also thought 27, on average, in 1972 and so on for most groups. On the other hand, an increase in the number of children expected in 1972 was associated with an increase in the average age at which women expected to complete their families while a decrease in the number expected was, in all cases, associated with a decrease in the average age at which families were said to be completed.

4.8 **Summary**

When both differences over marriage cohorts and comparisons for marriages of similar durations in 1967 and 1972 are considered, they indicate a lengthening, on average, of the first and second internatal intervals for the most recent marriages of 5–8 years' duration in 1972. This was brought about, despite an increase in the proportion of probably pre-maritally conceived first births, by an increase in the proportion of women who had not yet had a first birth within five years of marriage and in the proportion who had waited two-and-a-half years or longer after marriage for the birth of their first child.

A similar polarisation characterised the distribution of the lengths of the second internatal intervals. An increased proportion of women married between 1962 and 1967, compared with those married the same length of time five years previously, had had a second child within a year of the first, but an increased proportion had either waited three years or longer after the first or had not yet had a second child some four-and-a-half to five years or more after marriage.

Among the women investigated, those married in 1962 and 1963 had the shortest first and second intervals, on average. However, there is a suggestion that the third internatal interval for this cohort will be longer, on average, than that for the earlier marriage cohort. This lengthening of the third interval for the 1962–63 marriage cohort coincided with the lengthening of the second interval for the 1964–65 cohort. This suggests that events occurring in about 1968–69 led to a change in the patterns of family building and that the interval between births is more susceptible to such events than is family size. Birth intervals reflect such day-to-day events rather more than does family size within any strategy of family building which women have on marriage.

Because the numbers of women available for analysis were relatively few, it is not possible to assess with confidence whether these changes in the patterns of family building were widespread throughout the population investigated or whether they were confined to particular groups. It did seem that couples married between 1965 and 1967 where the husband in 1967 was in either a managerial or an unskilled occupation, particularly if the latter was upwardly mobile in 1972, were less likely than similar groups married between 1960 and 1964 to have had two children within five years of marriage.

The mean lengths of the first two internatal intervals were similar for those who expected one or two children in 1967 and differed significantly from the mean intervals of those who expected three or four. For parities of two, in particular, and also for those of three or four, the mean lengths of the first two intervals were shorter for those who expected a larger rather than a smaller number of children in 1967, even though by 1972 that number of children had not been achieved. Thus, those who had expected three or four children in 1967 but had

had only two five years later experienced shorter first and second intervals, on average, than those who had initially expected two. Since most of the second intervals had occurred after the 1967 interview, this suggests that the initial expectations had some influence on the lengths of the subsequent second intervals. This throws some light on the sequence of relationships between interval length and the stated number of children expected.

For children born between the two interviews, women were asked their opinions about the lengths of the intervals they had experienced. Of the children who were not completely unwanted at birth, 60 per cent were said to have been born at the time they were wanted; an overwhelming majority of the remainder would have been preferred at a shorter interval. The favoured intervals centred around 19–24 months or 31–35 months after marriage or after the previous child, for almost all parities.

When asked about the ages at which they expected to complete their families, the views expressed in 1972 were only a little different from those given in 1967. Not surprisingly, women who expected more children in 1972 than they had done in 1967 expected to or had completed their families at a higher age, on average, in 1972; those expecting fewer children had reduced the mean age at which they expected to complete child-bearing, while those expecting the same number of children thought that they would complete their families at similar ages in 1972 as in 1967.

5 Fecundity limitations

5.1 Introduction

The broad distinction between limitations on fecundity which are involuntary and derive from some apparent medical difficulty which affects the couple's likelihood of producing live children and those which arise from the voluntary regulation of fertility by some means of conception control has been retained from the previous study. In 1972, some data on legal abortions were also collected but the stated incidence of such abortions among these women although at a higher rate than the nationally recorded occurrences was too infrequent to warrant a detailed analysis of the data.

The relationships between both main kinds of fecundity limitation and family size, expectations and building habits have been considered in the previous chapters. Here we are concerned with a more comprehensive description of the incidence of both kinds of limitation, the changes which have affected these women in five years and the changes which distinguish these women, if at all, from those married for the same length of time, five years earlier and from those of the same age five years earlier. In this way, it will become apparent to what extent fecundity appears to have changed during a five-year marriage period and to what extent any change in future fecundity and in conception control was independent of the increased length of marriage.

5.2 The incidence of involuntary impairment

In 1967, 76 per cent of the women married between 1960 and 1967 were unaware of any involuntary limitation on their future fecundity; an additional 9 per cent, though considering themselves fecund, thought that they had had some difficulties prior to the 1967 interview while the remainder thought themselves (or thought their husbands) infecund in some way although only 1 per cent of all couples could be classified as definitely sterile. As the discussion in the previous chapters suggests, a substantial proportion of those who early on in marriage thought themselves relatively infecund were mistaken in this view.

When women came to be re-interviewed in 1972, the 1 per cent who were considered definitely sterile, mainly because of an operation or injury affecting conception, were omitted altogether. In addition, problems in contacting women who were childless in 1967 and who had, by 1972, moved from their 1967 address,[1] have probably resulted, overall, in a small underestimate of those affected by some degree of involuntary infecundity. These omissions are reflected to a certain extent in the 1967 distribution of their future fecundity by the women who were re-interviewed. Compared with the figures above for all women married between 1960 and 1967, 79 per cent of those re-interviewed had considered themselves free from any physical limitation to their fecundity in the immediate future in 1967.

In both the 1967 and 1972 studies, the assessment of involuntary infecundity was made on the basis of the women's answers to questions asking them whether they thought there was some *medical* reason for their finding it difficult or impossible to have children in the *future*. It was emphasised that we were interested in disabilities that affected the husband as well as the wife, though the information was obtained only from the wife. The women were further questioned[1] on the nature of the disability, whether or not a doctor had been consulted and on their interpretation of the doctor's assessment of the couple's chances of having further liveborn children. It was not possible within the context of the studies to obtain a more reliable prognosis of fecundity by direct reference to medical opinion.

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[1] See Appendix B.

Based on the answers to these questions, couples were classified according to the women's views of the couple's future fecundity. The classification system differed slightly for the two phases of the study (described below) but one problem was common to both. For analytic purposes, it seemed useful to distinguish couples who had used sterilisation for contraceptive purposes from those where an operation had been undergone for medical reasons, with sterilisation either as an unwanted side-effect or as an incidental bonus. In practice, it was virtually impossible to distinguish these categories from the answers given by the women. For example, some women were advised to have their 'tubes tied' but they were unclear in some cases whether this was solely for contraceptive purposes or whether the operation was also required for general or specific health purposes. The number of cases in which the operation was unwelcome and the number of cases where sterilisation was the result of an injury were too few to form the basis of any generalisations. Thus the category 'definitely sterile' in 1967 and 'has had an operation or injury preventing conception' in 1972 illustrate the results of the intervention and not the reason for it.

In 1967, the remaining categories were those who were 'probably sterile' either from choice, because of the likelihood of aggravating related physical difficulties or because conception was unlikely or advised against by the doctor, 'the sub-fecund' who described difficulties relating to conception, those 'fecund but with past difficulties' and the remainder who were unaware of any medical reasons for the limitation of their fecundity.

The classification system was improved in 1972 to reduce the number of ambiguous allocations. The effect overall was probably small, but the resulting categories were more homogeneous with respect to type of disability. The first category, 'husband or wife has had an operation or injury preventing conception' was confined to those with such an operation or injury and omitted those (a very small number) whose doctor was 'very sure' they could not have a child. The latter were included in the 1967 'definitely sterile' group. The second category in the 1972 classification of involuntary infecundity (table 5.1) consisted of those with difficulties relating specifically to the reproductive system —mainly conception but also to difficulties in producing living children unaffected by handicaps. Couples with other medical conditions which might be aggravated by a pregnancy were classified in the third group. The remaining group consisted of:

a. those who were currently unaware of any future fecundity limitation but thought that they had had some difficulty in the five years prior to the 1972 investigation
and

b. those totally unaware of any difficulty.

It is perhaps worth pointing out that some couples, through the regular use of contraception, may be unaware as yet of an existing impediment to conception, but after five or more years of marriage, the number is likely to be small.

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[1] See Appendix A. Qs 19–25.

Of the 1,384 women in the recall sample, 16 per cent said, in 1972, that they had reason to believe that they would find it difficult or impossible to have children in the future: for 10 per cent of the couples it was because either the husband or the wife had had a sterilising operation or injury. A further 7 per cent who were classified as fecund at the time of the second interview said that they had experienced some medical difficulties in having children in the previous five years. For this group of women, the proportion classified as fecund had declined from 79 per cent in 1967 to 76 per cent in 1972 (table 5.1). However, 10 per cent were definitely sterile in 1972 whereas none had been previously and the proportion indicating some degree of current impairment had declined from 12 per cent in 1967 to 6 per cent in 1972. As a measure in 1972 of infecundity affecting all those married between 1960 and 1967 these figures underestimate those definitely sterile by about 1–2 per cent and those with some impairment by the same proportion.

Table 5.1
Percentage distribution of future fecundity in 1972 (analysed by future fecundity assessment in 1967)

Future fecundity 1972	*All groups*	*Future fecundity 1967*			
		Probably sterile	*Sub-fecund*	*Fecund but with past difficulties*	*Fecund*
	%	%	%	%	%
Husband or wife has had operation or injury preventing conception	10	21	5	10	10
Difficulties relating to reproduction system	5	13	20	4	3
Other physical difficulties which would be aggravated by pregnancy	1	3	1	—	1
Fecund but with difficulties in the past five years	7	10	23	9	6
Fecund	76	51	44	77	80
Unclassified	1	2	7	—	*
Base	1,384	63	96	109	1,100

Although overall, the marginal distributions of fecundity in 1967 and 1972 were similar, there was considerable variation according to the assessment in 1967 (table 5.1). Of those who were unaware of any limitation to their future fecundity in 1967, 80 per cent remained so in 1972 while 10 per cent had undergone a sterilising operation. This latter proportion increased to 21 per cent for those who were classified as 'probably sterile' in 1967. On the other hand, half of those who thought they were 'probably sterile' in 1967 had since revised their opinion and were unaware of any disability in 1972. Similarly, almost half (44 per cent) of those classified as 'sub-fecund' in 1967 were classified as 'totally fecund' in 1972 although an additional 23 per cent who were currently fecund in 1972 said they had experienced difficulties in the past—presumably the sub-fecundity recorded in 1967. Thus almost half the women who gave some reason for thinking that their fecundity was limited in 1967 when they had been married for less than eight years no longer thought so in 1972. Similarly, three-quarters of those who expressed some unease about their past fecundity were unaware of any problem in 1972. This suggests that only in a minority of cases do fears of infecundity stated early on in marriage have a longer-term reality; in the present group between a quarter to just over a third of those couples who thought they had some difficulties in 1967 still maintained that they had limited fecundity or were totally sterile in 1972.

Five years further on in marriage, the situation for the re-interviewed women for whom information was available could be summarised:

> 76 per cent were unaware of any limitation of their future fecundity on both occasions, although some 8 per cent thought that they had had some difficulties prior to one or other of the interviews.
>
> 10 per cent had become sterile by 1972 mainly as the result of an operation.
>
> 8 per cent had considered their future fecundity less than totally impaired in 1967 but later thought themselves fecund.
>
> 3 per cent considered themselves fecund in 1967 but had since re-assessed their fecundity as impaired.
>
> 2 per cent considered their fecundity impaired on both occasions but less than totally.

Thus the largest single change in reported fecundity was brought about by a sterilisation operation while the next most important group consisted of those with what was probably a mistaken view of their relative infecundity in 1967 although in some cases a genuine impairment may have been remedied since.

Part of the increase in sterilisation was due to the effect on the marriage of time passing: tables 5.2 and 5.3 indicate that the incidence of sterilisation was greater among older women and among those married longer. It was also noticeably more prevalent by 1972 among couples where the husband was in a non-skilled manual occupation. On the other hand, difficulties relating to the reproductive system and other problems which would be aggravated by a pregnancy remained relatively constant over the different marriage durations and socio-economic groups although increasing for women who were in their late thirties.

Consequently, 73 per cent of women aged 38 or over considered themselves fecund in 1972 compared with 83 per cent of the sample as a whole. The proportion who thought themselves currently fecund also declined steadily from 88 per cent for couples with husbands in managerial occupations to 78 per cent for those in non-skilled manual occupations. This was related to the relatively higher proportion sterile in the non-skilled manual groups.

Table 5.2 *Women married 1960–67*
Percentage distribution of the future fecundity of women in 1972 (analysed by date of marriage)

Future fecundity 1972	*All dates*	*Date of marriage*			
		1960–61	*1962–63*	*1964–65*	*1966–67*
	%	%	%	%	%
Husband or wife has had operation or injury preventing conception	10	16	12	7	4
Difficulties relating to reproductive system	5	4	6	4	4
Other physical difficulties which would be aggravated by pregnancy	1	1	1	*	2
Fecund but with difficulties in past five years	7	6	4	11	9
Fecund	76	72	76	77	79
Unclassified	1	1	1	1	1
Base	1,384	365	387	404	228

On the other hand, part of the increase in sterilisation was independent of the length of time the couples had been married and reflected a real change in practice compared with five years previously. As tables 5.5 and 5.6 show, the increase in sterilisation is very much a feature of recent practice. At each dura-

Table 5.3 *Women married 1960–67*
Percentage distribution of the future fecundity of women in 1972 (analysed by wife's age last birthday)

Future fecundity 1972	*All ages*	*Wife's age last birthday*			
		27 and under	*28–32*	*33–37*	*38 and over*
	%	%	%	%	%
Husband or wife has had operation or injury preventing conception	10	7	11	14	15
Difficulties relating to reproductive system	5	4	5	4	7
Other physical difficulties which would be aggravated by pregnancy	1	1	1	*	3
Fecund but with difficulties in the past five years	7	7	7	9	—
Fecund	76	80	76	71	73
Unclassified	1	1	1	1	3
Base	1,384	74	290	641	363

Table 5.4 *Women married 1960–67*
Percentage distribution of the future fecundity of women in 1972 (analysed by husband's socio-economic group)

Future fecundity 1972	*All groups*	*Husband's socio-economic group 1972*			
		Managerial	*Other non-manual*	*Skilled manual*	*Other manual*
	%	%	%	%	%
Husband or wife has had operation or injury preventing conception	10	8	10	10	15
Difficulties relating to reproductive system	5	3	5	5	5
Other physical difficulties which would be aggravated by pregnancy	1	1	1	1	1
Fecund but with difficulties in past five years	7	8	7	7	10
Fecund	76	80	77	76	68
Unclassifiable	1	1	1	1	1
Base	1,384	312	299	556	215

tion of marriage, a greater proportion of the couples assessed in 1972 compared with those in 1967 were classified as sterile for the future. Whereas 1 per cent of those interviewed in 1967 and married 5–6 years were said to be sterile and this increased to 4 per cent for those married 11–12 years, the comparable proportions were 4 per cent and 16 per cent for women interviewed in 1972. In practice, the differences between those interviewed in 1967 and 1972 were likely to be even greater because of the underestimate of the incidence of sterility in 1972.

In the same way, the incidence of sterility was greater at each age group among women interviewed in 1972 compared with those interviewed in 1967. At each age, more of the women interviewed recently claimed that they or their husbands were unable to have any children in the future. Thus the varying incidence of sterilising operations cannot be explained by the differing age structures of the women interviewed at the two points in time and indicated a noticeable increase in sterilising operations during the five years 1967–72.

On the other hand, the vaguer descriptions of other kinds of impaired fecundity were much less marked among women interviewed more recently and a slightly higher proportion at each marriage duration and age were totally unaware of any limitation to their future fecundity.

Table 5.5 *Women married 1955–62*
Women married 1960–67

A comparison of the percentage distributions of the future fecundity of women with comparable durations of marriage in 1967 and 1972 (analysed by duration of marriage)

Future fecundity 1967 and 1972	*Duration of marriage*									
	All durations		*11–12 years*		*9–10 years*		*7–8 years*		*5–6 years*	
	in 1967	*in 1972*	*in 1967*	*in 1972*	*in 1967*	*in 1972*	*in 1967*	*in 1972*	*in 1967*	*in 1972*
	%	%	%	%	%	%	%	%	%	%
Husband or wife has had operation or injury preventing conception (definitely sterile)	2	10	4	16	3	12	3	7	1	4
Impaired fecundity	18	6	20	5	18	7	18	4	16	6
Fecund	78	83	75	78	77	80	78	88	82	88
Unclassified	2	1	2	1	2	*	2	1	1	1
Base	2,420	1,384	604	365	593	387	596	404	627	228

Table 5.6 *Women aged 21–34 in 1967*
Women aged 21–34 in 1972

A comparison of the percentage distributions of the future fecundity of women of comparable ages in 1967 and 1972 (analysed by wife's age last birthday)

Future fecundity 1967 and 1972	*Age last birthday*											
	All ages		*21–24*		*25–27*		*28–29*		*30–32*		*33–34*	
	in 1967	*in 1972*	*in 1967*	*in 1972*	*in 1967*	*in 1972*	*in 1967*	*in 1972*	*in 1967*	*in 1972*	*in 1967*	*in 1972*
	%	%	%	%	%	%	%	%	%	%	%	%
Husband or wife has had operation or injury preventing conception (definitely sterile)	2	11	1	2	2	8	2	11	2	12	5	15
Impaired fecundity	14	5	9	4	13	5	16	6	18	6	20	5
Fecund	82	83	89	93	84	87	81	83	78	81	74	80
Unclassified	2	1	2	—	1	1	2	1	2	*	2	1
Base	3,453	1,457	848	55	708	309	582	270	792	463	523	356

The increase in sterilisation which was a noticeable feature of the period 1967–72 is discussed further in the next section.

5.3 Sterilisation

In 1967, something over 1 per cent of women married 1960–67 were classified as 'definitely sterile' as far as the future was concerned. That is, they or their husbands had had a sterilising operation or their doctor was 'very sure' that they could not have a child in the future. By 1972, the proportion who had had a sterilising operation had increased to at least 10 per cent and as was pointed out previously this increase could not be attributed merely to the passage of time since the incidence of such operations for women married for comparable lengths of time and of the same age five years earlier was of the order of 2 per cent. This increase in the incidence of sterilisation suggests a real change in practice. It seemed worth while describing the situation in 1972.

Among those who had had an operation or injury, approximately 42 per cent of the cases recorded the husband as having had a sterilising operation and the remainder were of the wife. Apart from those with only one child, vasectomies occurred more frequently among couples with smaller families; 65 per cent of operations for couples with two children were reported as vasectomies compared with 24 per cent of the operations carried out on husbands and wives with four or more children. As the number of children increased so did the incidence of female sterilisation. Half the operations carried out when families had three children and nearly three-quarters of those where the couples had four or more children were of this type, whereas the occurrence of hysterectomies which are less likely to be carried out for purely contraceptive purposes decreased with an increase in the number of children. This suggests a picture in which sterilisation as a form of contraception is being employed by 8–9 per cent of couples married between 1960 and 1967 and that where the couple have two children, male forms of sterilisation predominate but that the proportion of women sterilised increased as the number of children increased. Altogether, sterilisation increased sharply after the couple had had three children—almost one in six couples with three children had been sterilised (apart from hysterectomies) while for those with four or more children sterilisation became in effect one of the more important methods of family limitation. About a third of couples with four or more children had had a sterilising operation.

Table 5.7 *Women married 1960–67*
Couples who have had an operation making it difficult or impossible to have more children
Percentages of husbands/wives having an operation (analysed by number of living children in 1972)

Type of operation	*All groups*	*Number of living children in 1972*			
		1	*2*	*3*	*4 or more*
	%	%	%	%	%
Husband has had operation					
Vasectomy/sterilisation	41	(20)	(65)	(35)	(24)
Other	1	(10)	—	—	—
Wife has had operation					
Hysterectomy	11	(20)	(15)	(10)	(3)
Sterilisation	43	(50)	(15)	(50)	(73)
Other	4	—	(4)	(4)	—
Base	140	10	46	48	33

The other noticeable feature of sterilisation particularly when it appeared to be used as a contraceptive technique was that the kind of operation carried out varied with the husband's socio-economic group. Altogether, the incidence of sterilisation remained relatively constant over the non-manual/skilled manual groups and only increased for the non-skilled manual groups where it affected about 14 per cent of the couples. However, there was an obvious variation in the

Table 5.8 *Women married 1960–67*
Couples who have had an operation making it difficult or impossible to have more children
Percentages of husbands/wives having an operation (analysed by husband's socio-economic group)

Type of operation	*All groups*	*Husband's socio-economic group*			
		Managerial	*Other non-manual*	*Skilled manual*	*Other manual*
	%	%	%	%	%
Husband has had operation					
Vasectomy/sterilisation	41	(63)	(52)	34	(29)
Other	1	—	—	2	—
Wife has had operation					
Hysterectomy	11	(13)	(10)	9	(16)
Sterilisation	43	(21)	(38)	52	(48)
Other	4	(4)	—	4	(7)
Base	140	24	29	56	31

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type of sterilisation with socio-economic group: male forms of sterilisation declined systematically from the 'managerial' to the 'other manual' group while female sterilisation increased particularly for both 'manual' groups. Excluding women who had undergone hysterectomies, about 7 per cent of women with husbands in non-skilled manual occupations had been sterilised compared with 2 per cent of women with husbands in managerial occupations. To some degree, this is related to the varying numbers of children which couples have but it indicates also the differing processes whereby couples find available to them different methods of controlling conceptions.

5.4 Voluntary conception control

Apart from sterilisation, almost all couples who were capable of child-bearing used some kind of contraception to limit the size of their families and, to a lesser degree, to regulate when they have their children. In this section, we are concerned with describing the couples' past and current use of the different methods of voluntarily limiting or regulating their families.

All informants were shown a card listing and numbering the more usual methods of contraception and asked whether they or their husbands had ever used any of the methods listed. Those women who were not pregnant at the time of the interview and had not (or their husbands had not) had an operation or injury preventing conception were asked about the methods which they or their husbands were using 'at present'. Pregnant women and those who had had an operation or injury (of either husband or wife) were asked about the methods used in the past.

Summaries illustrating various facets of conception control were compiled from the answers to the individual questions. The main one used in this section reflects the use of family planning techniques in 1972 in terms of the 'reliability' of the methods used.

The summary illustrating the reliability of the methods which couples were using in 1972 classified them in one of the following eight categories:

Uses reliable methods 'at present'
Uses less reliable methods 'at present'
Wants a baby/is pregnant but
  used a reliable method previously
  used less reliable methods previously
Not using a method for other reasons but
  used reliable methods previously
  used less reliable methods previously
Never used any method
Those who had had a sterilising operation preventing conception.

Briefly, the sheath, loop, cap used with jelly or cream, aerosol foam and the contraceptive pill were considered reliable methods and the remainder less reliable methods of contraception. If a couple were using both a reliable and a less reliable method they were classified as using a reliable method. In addition to this summary, the actual methods 'ever' used and last used by the couples are described.

Seventy-one per cent of women married between 1960 and 1967 claimed that they (or their husbands) were voluntarily limiting their families at the time of the 1972 interview. A further 12 per cent reported that they (or their husbands) were not currently using any method but had done so in the past. Almost all of the latter group were either pregnant at the time of interview or were not using a method because they wanted a baby. Only 4 per cent of the 1960–67 marriage cohort said in 1972 that they had never used any method of family planning. The comparable proportions for the same marriage cohort in 1967 were 67 per cent, 18 per cent and 11 per cent respectively. Thus five years further on in marriage had led to a decline in 'never' users from 11 per cent to 4 per cent.

Table 5.9 gives the distribution of the use of family planning in 1972 analysed by the date of marriage. Fifty-nine per cent of women married between 1960 and 1967 were using reliable methods of contraception at the time of the 1972 interview and a further 9 per cent, who were not using any method when interviewed, had previously used a reliable method. A total of 15 per cent were using, or had previously used, less reliable methods of contraception—the safe period, withdrawal, douching, a cap without a spermicide or spermicide without a cap, or suppositories. If those who had a sterilising operation are excluded together with those who have never used contraception or who could not be classified, the ratio of users of reliable to less reliable methods was approximately 9:2.

Table 5.9 *Women married 1960–67*
Use of family planning 1972 (analysed by date of marriage)

Use of family planning 1972	*All dates*	*Date of marriage*			
		1960–61	*1962–63*	*1964–65*	*1966–67*
	%	%	%	%	%
Uses reliable methods at present	59	55	60	62	58
Uses less reliable methods at present	12	14	14	10	12
Wants a baby/is pregnant but					
used reliable method before	8	4	4	11	15
used less reliable method before	3	2	4	4	3
Not using a method for other reasons but					
used reliable method before	1	2	1	*	1
used less reliable method before	*	—	—	1	—
Never used any method	4	3	4	3	5
Those who have had a sterilising operation	10	16	12	7	4
No answer	2	3	1	2	2
Base	1,384	365	387	404	228

Women in the later marriage cohorts were more likely to be using (or have used) reliable methods of contraception in 1972. The proportion of women who were using (or had used) reliable methods in 1972 increased from 61 per cent for women married between 1960 and 1961 to 74 per cent for women married between 1966 and 1967. However, only 58 per cent of the latter group of women were currently using reliable methods in 1972: 15 per cent, who were users of the more reliable forms of contraception, were not using any method of family limitation at the time of the interview because they were either pregnant or wanted a baby. The proportion of women who were not using any form of contraception because either they or their husband had had a sterilising operation—possibly as a method of conception control—decreased with the later dates of marriage, from 16 per cent for women married between 1960 and 1961 to 4 per cent for women married between 1966 and 1967. If the proportion sterilised is added to the current or last users of reliable methods of contraception, a constant proportion of couples over all marriage cohorts—between 77 per cent and 80 per cent—appeared to be using family planning methods which in theory could be considered reliable.

The use of reliable rather than less reliable methods of contraception is also associated with age at marriage (table 5.10). Women who married at later ages (or their husbands) were less likely to be using, or have previously used, reliable methods of contraception in 1972. Twenty-three per cent of women who married at the age of 23 or 24 and 20 per cent of women who married at the age of 25 or later were using, or had previously used, less reliable methods compared with 12 per cent of women married before the age of 20 and 14 per cent of women married between the ages of 20 and 22. Moreover 8 per cent of women who married at the age of 25 or later had never used any form of contraception compared with only 3 per cent of women married before the age of 25.

Table 5.10 *Women married 1960–67*
Use of family planning 1972 (analysed by age at marriage)

Use of family planning 1972	*All ages*	*Age at marriage*			
		Under 20	*20–22*	*23–24*	*25 and over*
	%	%	%	%	%
Uses reliable methods at present	59	64	60	52	56
Uses less reliable methods at present	12	10	11	18	15
Wants a baby/is pregnant but					
used reliable methods before	8	6	10	9	6
used less reliable methods before	3	2	3	4	5
Not using a method for other reasons but					
used reliable methods before	1	1	1	1	1
used less reliable methods before	*	*	—	1	—
Never used any method	4	3	3	3	8
Those who have had a sterilising operation	10	12	10	11	8
No answer	2	1	3	1	1
Base	1,384	406	567	194	217

Table 5.11 *Women aged 21–34 in 1972*
Use of family planning in 1972 (analysed by wife's age last birthday)

Use of family planning 1972	*All ages*	*Wife's age last birthday*				
		21–24	*25–27*	*28–29*	*30–32*	*33–34*
	%	%	%	%	%	%
Uses reliable methods at present	60	65	63	60	59	56
Uses less reliable methods at present	13	13	10	10	15	15
Wants a baby/is pregnant but						
used reliable methods before	8	13	10	12	5	6
used less reliable methods before	3	—	3	4	3	3
Not using a method for other reasons but						
used reliable method before	1	2	*	1	2	1
used less reliable method before	*	—	*	—	*	—
Never used any method	3	6	3	2	3	3
Those who have had a sterilising operation	11	2	8	11	12	15
No answer	1	—	3	—	1	1
Base	1,470	55	309	270	463	356

A similar association is found between the use of family planning in 1972 and the informant's age in 1972 (table 5.11). For all women aged 21–34 in 1972 (and who had been married by 1967) the ratio of 'reliable' users to 'less reliable' users decreased consistently with increasing age from approximately 6:1 for those aged 21–24 in 1972 to 3:1 for those aged 33–34 in 1972.

When contraceptive methods were analysed by the number of living children, it became obvious that it was the childless and to a much smaller extent those with one child who had never used any method of conception control. However, almost a quarter of the childless had previously used a reliable method of family planning. The current or past use of reliable methods was most frequent among those with two children and declined slightly for those with three. So too did the use of the less reliable methods. The ratios of current or past users of reliable to less reliable methods of contraception were almost five to one for those with two children and just over six to one for those with three. For those with three children and even more for those with four, sterilisation became an increasingly de facto method of conception control; hence the smaller proportion using reliable methods of contraception. The less reliable methods of contraception were most frequently used by those with one child—23 per cent were using or had last used such methods.

Table 5.12 *Women married 1960–67*
Use of family planning 1972 (analysed by number of living children in 1972)

Use of family planning 1972	*All numbers*	*Number of living children in 1972*				
		0	*1*	*2*	*3*	*4 or more*
	%	%	%	%	%	%
Uses reliable methods at present	59	29	49	71	63	38
Uses less reliable methods at present	12	5	16	14	10	14
Wants a baby/is pregnant but						
used reliable methods before	8	23	16	4	5	4
used less reliable methods before	3	4	7	2	1	4
Not using a method for other reasons but						
used reliable method before	1	3	2	*	*	1
used less reliable method before	*	—	*	—	*	—
Never used any method	4	27	4	1	—	—
Those who have had a sterilising operation	10	4	4	7	19	36
No answer	2	5	2	2	1	3
Base	1,384	126	258	653	250	93

In the chapter on 'Family size' and in the previous section the associations between socio-economic group, as defined by the husband's occupation, and both the number of children and the incidence of infecundity were discussed. Couples in which the husband was in a managerial occupation or in a non-skilled manual occupation had, on average, larger families than the other socio-economic groups. However, couples in the latter group were most likely to be unable to have children in the future because either the husband or the wife had had an operation preventing conception. To add to the picture table 5.13 gives the distribution of the use of family planning in 1972 analysed by socio-economic group. Couples where the husband was in a managerial occupation had a ratio of users of reliable to less reliable methods of contraception of approximately 6:1 compared with a ratio of approximately 3½:1 for couples where the husband was in a skilled manual occupation. Couples where the husband was in a non-skilled occupation had the highest proportion of informants who had never used any form of contraception and of those who had had a sterilising operation. However, if sterilisation is included, the proportion of couples protected by reliable methods ranged from 84 per cent for couples classified as managerial to 75 per cent for those in skilled manual occupations.

It was in the skilled manual group that there was proportionately more reliance on the less reliable methods of family planning.

Table 5.13 *Women married 1960–67*
Use of family planning 1972 (analysed by husband's socio-economic group)

Use of family planning 1972	*All groups*	*Husband's socio-economic group*			
		Managerial	*Other non-manual*	*Skilled manual*	*Other manual*
	%	%	%	%	%
Uses reliable methods at present	59	66	60	58	53
Uses less reliable methods at present	12	10	12	14	13
Wants a baby/is pregnant but					
used reliable method before	8	9	10	6	9
used less reliable method before	3	2	2	5	2
Not using a method for other reasons but					
used reliable method before	1	1	1	1	—
used less reliable method before	*	—	—	*	—
Never used any method	4	2	3	4	7
Those who have had a sterilising operation	10	8	10	10	15
No answer	2	2	2	2	1
Base	1,384	312	299	556	215

Similarly, the association between religion and number of children was previously considered and it was found that couples in which both husband and wife were Catholic had the largest mean family sizes in 1972. Table 5.14 shows that these couples were also less likely to be using, or to have previously used, reliable methods than couples of any other religion or combinations of religion though the differences were not as large as is popularly assumed. Forty-three per cent of couples in which both husband and wife were Catholic were using a reliable method of contraception and almost one-half of the 17 per cent who were not using a method because they were pregnant or wanted a baby had previously been using a reliable method. This group also had the smallest proportion of informants who said that they were unable to have children in the future (7 per cent) and the highest proportion of couples who had never used any form of contraception (9 per cent). When a method of contraception was used by couples in which only one partner was Catholic, it was more likely to be a reliable method if the Catholic partner was the wife rather than the husband.

Thus the situation in 1972 for those women married between 1960 and 1967 or aged under 30 in 1967 was one of sterility for about 10 per cent of the couples, pregnancy or awaiting pregnancy for a further 11 per cent (proportionately more among the childless) with about two-thirds having previously used the more reliable methods of contraception, while 59 per cent were currently using what could be called the more reliable and 12 per cent the less reliable methods of conception control. Only 4 per cent had never used any method of conception control; proportionately more among those who married later and, again, particularly among the childless. What then were the actual methods currently or last used by those who had used family planning? The description is given in table 5.15.

According to the wives' reports at the time of the 1972 investigation 39 per cent of users made use of the contraceptive sheath and an additional 32 per cent the contraceptive pill. Withdrawal was the only other method used by more than

Table 5.14 *Women married 1960–67*
Use of family planning 1972 (analysed by religion)

Use of family planning 1972	*All religions*	*Religion*					
		Husband and wife both Christian	*Husband: Christian Wife: Catholic*	*Husband: Catholic Wife: Christian*	*Husband and wife both Catholic*	*Husband and wife both non-Christian*	*All other combinations*
	%	%	%	%	%	%	%
Used reliable methods at present	59	62	58	48	43	56	57
Used less reliable methods at present	12	11	13	19	21	13	10
Wants a baby/is pregnant but:							
used reliable methods before	8	8	4	5	8	7	9
used less reliable methods before	3	3	4	5	9	2	2
Not using a method for other reasons but:							
used reliable method before	—	1	—	2	—	2	1
used less reliable method before	*	—	—	—	—	1	1
Never used any method	4	3	6	5	9	8	6
Those who have had a sterilising operation	10	10	13	11	7	10	12
No answer	2	2	2	5	3	1	2
Base	1,384	1,002	69	62	86	98	67

10 per cent of couples. Those married more recently were less likely to use the sheath and withdrawal particularly if married between 1966 and 1967 and the use of the safe period appeared to be declining also. The main increase was in the use of the pill though there may also have been a small increase in the use of spermicides.

Table 5.15 *Women married 1960–67 (excluding those who had never used any method of contraception)*
Methods of contraception used/last used in 1972 (analysed by date of marriage)

Method of contraception used/last used in 1972	*All dates*	*Date of marriage*			
		1960–61	*1962–63*	*1964–65*	*1966–67*
	%	%	%	%	%
Sheath	39	39	42	39	34
Contraceptive pill	32	28	26	35	44
Husband withdraws	17	19	19	17	12
Loop/coil/IUD	7	9	8	4	6
Safe period/rhythm method	7	9	7	6	5
Cap with jelly or cream	5	4	5	6	4
Jellies/creams/suppositories/pessaries/foam/Emko	2	2	2	2	6
Cap used by itself	1	*	1	1	1
Abstinence	1	*	1	*	1
Douching	*	—	1	*	—
Other	*	1	—	—	—
No answer	1	1	—	1	1
Base	1,324	349	368	391	216

Further analyses according to the wife's age at marriage and the husband's socio-economic group showed that the use of the pill was very much associated with the age at which the wife had married. Almost half (42 per cent) of the women married under 20 used the pill compared with 22 per cent of those who married at 25 or over, while the use of the sheath and safe period was more frequent among those who married older. The sheath was more common among both the non-manual groups while the pill was almost equally used by all groups except the managerial. In that group there was a relatively more frequent use made of the diaphragm cap with spermicide. Withdrawal as a method of contraception was used by about a fifth of the manual groups but only by 11 per cent of those in the remaining groups.

For those married 1960–67 as a group, the major net changes since 1967 were the supplanting of withdrawal by the pill as the second most frequently used method, the increase in the use of the loop from about 2 per cent to about 7 per cent of couples and a decrease in the use of the safe period. At both points in time, the sheath was the most frequently used single method, although, by 1972, this method was being superseded by the pill among couples married in 1966 and 1967.

Table 5.16 *Women married 1960–67*
Methods of contraception ever used by 1972 (analysed by date of marriage)

Methods of contraception ever used	*All dates*	*Date of marriage*			
		1960–61	*1962–63*	*1964–65*	*1966–67*
	%	%	%	%	%
Sheath	69	72	69	68	66
Contraceptive pill	49	45	43	52	59
Husband withdraws	36	36	38	37	30
Cap with jelly or cream	18	18	18	19	13
Safe period/rhythm method	16	17	18	19	13
Loop/coil/IUD	9	10	12	7	7
Jellies/creams/suppositories/ pessaries/foam/Emko	18	18	10	6	10
Douching	2	2	3	2	1
Abstinence	2	2	3	1	*
Cap used by itself	2	2	2	2	1
Other	1	1	1	*	*
Never used any method	4	5	5	4	5
Base	1,384	365	387	404	228

Table 5.17 *Women married 1960–67*
Methods of contraception ever used by 1972 (analysed by age at marriage)

Methods of contraception ever used	*All ages*	*Age at marriage*			
		Under 20	*20–22*	*23–24*	*25 and over*
	%	%	%	%	%
Sheath	69	70	71	69	60
Contraceptive pill	49	62	48	41	35
Husband withdraws	36	44	36	34	24
Cap with jelly or cream	18	14	19	23	17
Safe period/rhythm method	16	14	15	18	22
Loop/coil/IUD	9	10	8	8	9
Jellies/cream/suppositories/ pessaries/foam/Emko	8	8	8	8	7
Douching	2	2	2	4	1
Abstinence	2	1	1	2	3
Cap used by itself	2	1	2	4	2
Other	1	1	1	1	1
Never used any method	4	3	3	4	9
Base	1,384	406	567	194	217

By 1972 about half of the women had had experience of the contraceptive pill and this proportion increased to 59 per cent for those married most recently and was even higher among those married young. Experience of the sheath declined slightly over the marriage durations and similarly declined slightly for those married at higher ages while still remaining the technique with which most respondents were familiar.

5.5 Changes in conception control 1967 and 1972

The changes that have occurred over the five year period are considered separately, first for the women who were interviewed in both 1967 and in 1972 and then by comparing women who were married for the same length of time or were of the same age in 1967 and in 1972. The latter comparison would suggest the extent to which the changes that had occurred to the re-interviewed women during these five years were ones similarly experienced or not by women married for the same length of time or of the same age five years earlier. The final part of this section considers the ways in which couples had actually used family planning between 1967 and 1972.

To simplify the analysis for the re-interviewed women, those couples who had undergone a sterilising operation since 1967 were omitted from the tables. To complete the picture, however, the data are given: of the 144 couples who had had such an operation

> 72 per cent had used or last used a reliable method of contraception in 1967, compared with 64 per cent of the remaining couples
>
> 18 per cent had used or last used a less reliable method in 1967, compared with 25 per cent of the remaining couples
>
> 10 per cent had never used any method compared with 11 per cent of the remaining couples

Thus there is no evidence to suggest that those who had undergone a sterilising operation were, as a group, less experienced or more feckless than the remaining couples in their use of contraception though the group may contain within it different kinds of couples.

For the remaining 1,240 couples, the changes in the type of method are given in table 5.18 while they are given separately for those who expected further children, were uncertain or expected no further children in table 5.19.

Table 5.18 *Women married 1960–67 (excluding those who had had an operation preventing conception)*
Use of family planning 1972 (analysed by use of family planning 1967)

Use of family planning 1972	*All methods in 1967*	*Use of family planning 1967*		
		Uses/last used reliable methods	*Uses/last used less reliable methods*	*Never used any method*
	%	%	%	%
Uses/last used reliable methods	76	88	53	56
Uses/last used less reliable methods	18	9	42	16
Never used any method	4	1	3	27
No answer	2	2	2	1
Base	1,240	793	310	131

Overall, there had been an increase in the proportion of the re-interviewed couples who were using the more reliable methods of contraception. Not unexpectedly, the greatest change had occurred among those who had previously used a less reliable or no method of family planning. Of those previously using the less reliable methods, 53 per cent had changed to a more reliable method by 1972 while 42 per cent continued to use a less reliable method. A considerable

Table 5.19 *Women married 1960–67 (excluding those who had an operation/injury by 1972 preventing conception)*
Use of family planning 1972 (analysed by whether expects more children in 1972 and by use of family planning 1967)

Use of family planning 1972	*Those who probably or definitely expect any (more) children (after present pregnancy) in 1972*				*Those who are uncertain whether they expect any (more) children (after present pregnancy) in 1972*				*Those who probably or definitely expect no (more) children (after present pregnancy) in 1972*			
	All methods in 1967	*Use of family planning 1967*			*All methods in 1967*	*Use of family planning 1967*			*All methods in 1967*	*Use of family planning 1967*		
		Uses/last used reliable methods	*Uses/last used less reliable methods*	*Never used any method*		*Uses/last used reliable methods*	*Uses/last used less reliable methods*	*Never used any method*		*Uses/last used reliable methods*	*Uses/last used less reliable methods*	*Never used any method*
	%	%	%	%	%	%	%	%	%	%	%	%
Uses/last used reliable methods	67	80	(49)	(39)	71	88	47	(46)	80	90	55	72
Uses/last used less reliable methods	20	13	(44)	(21)	20	8	44	(21)	16	8	41	10
Never used any method	10	2	(7)	(40)	7	2	5	(33)	2	*	2	16
No answer	3	5	—	—	2	2	4	—	2	2	2	2
Base	209	128	43	38	181	102	55	24	838	556	209	67

proportion (27 per cent) of those who had not used any method of conception control in 1967 were still non-users five years later, although over half had become users of the more reliable methods.

In the previous section it was suggested that women (or their husbands) may use more reliable methods of contraception when their family is completed or nears completion. In order to investigate this further the uses of family planning in 1967 and 1972 are given in table 5.19 for women who said that they expected to have more children, did not expect to have any more children or were uncertain in 1972. All the informants were asked whether they expected to have any more children and those who were pregnant were asked whether they expected to have more children 'after this baby'. This table indicates that those informants who 'probably' or 'definitely' expected to have more children were less likely to be using, or have used, reliable methods of contraception in 1972 (67 per cent) than women who said that they 'probably' or 'definitely' would have no more children. Eighty per cent of the latter group were using, or had previously used, reliable methods as were 71 per cent of those women who were 'uncertain' whether they would have any more children. These figures certainly support the hypothesis that women who consider their family to be complete are more likely to be using, though not exclusively, reliable methods of contraception than women who 'probably' or 'definitely' expect more children or those who are 'uncertain' whether they will have further children. Moreover, for all categories of use in 1967 a higher proportion of those women who said they were unlikely to have further children were using more reliable methods in 1972 than in 1967. Seventy-two per cent of those women who indicated that their family was probably complete, and who had never used any contraceptive methods when interviewed in 1967, had used reliable methods by 1972; 90 per cent of those who had used reliable methods in 1967 were still using reliable methods in 1972 and over half of those who had been using less reliable methods in 1967 had changed to the use of more reliable forms of contraception by 1972. Only 2 per cent of women who expected no more children in 1972 had never used any method of contraception compared with 10 per cent of those women who indicated that they 'probably' or 'definitely' expected to have further children and 7 per cent of those who were 'uncertain' whether they expected to have any more children.

To summarise briefly, women married between five and 12 years in 1972 and 'at risk' at the time of the interview were more likely to be using, or to have last used, reliable methods in 1972 than in 1967. Those women who indicated that their families were probably or definitely complete had used more reliable methods of contraception in 1972 than women who were uncertain whether they would have more children and those who probably or definitely expected further children. Moreover, the change from non-use and from less reliable to reliable methods of contraception between 1967 and 1972 was most marked for women who said that they did not expect to have any more children.

The previous discussion was concerned with changes to contraceptive usage over a five-year period for the same group of women (i.e. women married between 1960 and 1967 and interviewed in both 1967 and 1972) and it was shown that these women were more likely to be using reliable methods in 1972 than in 1967, especially if they did not expect to have any more children.

Thus the change in the methods of contraception used was a function of the points in the marriage continuum that the women found themselves at the time of the two interviews: at the second interview the women were closer to completing their families. The question then arises of the extent to which there had also been a change in usage between 1967 and 1972 which was independent of the length of time the women had been married. To distinguish the real changes from those due to an increase in marriage duration and in age, the uses of family planning by women married between 1960 and 1967 and those aged 21–34 in 1972 are compared with the use of family planning in 1967 by women married between 1955 and 1962 and women aged 21–34 in 1967. Table 5.20 compares the contraceptive usage of women married 5–12 years in 1967 with the contraceptive methods used by women married 5–12 years in 1972.

Table 5.20 *Women married 1955–62*
Women married 1960–67
A comparison of the use of family planning by women of similar marriage durations in 1967 and 1972

Use of family planning	*Duration of marriage*									
	All durations		*11–12 years*		*9–10 years*		*7–8 years*		*5–6 years*	
	in 1967	*in 1972*	*in 1967*	*in 1972*	*in 1967*	*in 1972*	*in 1967*	*in 1972*	*in 1967*	*in 1972*
	%	%	%	%	%	%	%	%	%	%
Uses reliable methods at present	52	59	54	55	52	61	48	62	53	58
Uses less reliable methods at present	22	12	23	14	25	14	23	10	20	12
Wants a baby/is pregnant but:										
used reliable methods before	8	8	5	4	5	4	9	11	12	15
used less reliable methods before	3	3	2	2	3	4	4	4	4	3
Not using a method for other reasons but:										
used reliable method before	1	—	1	2	—	1	1	*	1	1
used less reliable method before	*	*	*	—	*	—	*	1	—	—
Never used any method	8	4	7	3	8	4	8	3	7	5
Those who have had a sterilising operation	6	10	8	16	7	12	7	7	3	4
No answer	—	2	—	3	—	1	—	2	—	2
Base	2,420	1,384	604	365	593	387	596	404	627	228

Table 5.21 *Women aged 21–34 in 1967*
Women aged 21–34 in 1972
A comparison of the use of family planning by women of similar ages in 1967 and 1972

Use of family planning	*Wife's age last birthday*											
	All ages		*21–24*		*25–27*		*28–29*		*30–32*		*33–34*	
	in 1967	*in 1972*	*in 1967*	*in 1972*	*in 1967*	*in 1972*	*in 1967*	*in 1972*	*in 1967*	*in 1972*	*in 1967*	*in 1972*
	%	%	%	%	%	%	%	%	%	%	%	%
Uses reliable methods at present	51	60	51	65	47	63	51	60	51	59	54	56
Uses less reliable methods at present	21	13	17	13	23	10	20	10	26	15	21	15
Wants a baby/is pregnant but:												
used reliable methods before	9	8	13	13	11	10	9	12	8	5	5	6
used less reliable methods before	4	3	6	—	5	3	4	4	2	3	3	3
Not using a method for other reasons but:												
used reliable method before	*	1	*	2	1	*	*	1	*	2	1	1
used less reliable method before	*	*	—	—	—	*	—	—	*	*	1	—
Never used any method	9	3	10	6	9	3	10	2	6	3	8	3
Those who have had a sterilising operation	6	11	3	2	4	8	6	11	7	12	8	15
Base	3,453	1,470	848	55	708	309	582	270	792	463	523	356

For all durations of marriage those married between 1960 and 1967 were more likely to be using (or have last used) a reliable method of contraception in 1972 than women of comparable durations of marriage in 1967. The ratio of reliable to less reliable users was 9 : 2 for women married 5–12 years in 1972 compared with a ratio of approximately 4 : 2 for women married 5–12 years in 1967. The difference was particularly noticeable among those married 7–8 years. Moreover, proportionately twice as many informants in 1967 *said* that they had never used any form of contraception compared with women of comparable durations of marriage in 1972.

Table 5.21 compares the use of family planning in 1967 and 1972 for women of comparable ages at these times. Once again it is apparent that women interviewed in 1972 were more likely than women of comparable ages five years previously to be using, or have used, reliable methods of contraception. The ratio of reliable to less reliable users was almost 9 : 2 for women aged 21–34 in 1972 and approximately 5 : 2 for women aged 21–34 in 1967. Moreover, the differences were particularly noticeable at the younger ages. Women aged 21–34 in 1972 were more than twice as likely as women of the same age five years earlier to be using reliable rather than the less reliable contraceptive methods in addition to the lower proportion who said they had never used contraception. Only among those aged 30 or over were the differences in the use of the reliable/less reliable methods reduced, but even at these ages, the reliable methods were used more frequently than the less reliable among those aged 30 or over in 1972 compared with those of the same age five years earlier.

Both these tables (5.20 and 5.21) demonstrate that those women who were interviewed in 1972 were more likely to be using reliable methods of contraception than similar women interviewed in 1967. Since both groups of women are comparable in terms of duration of marriage and age the available data appear to suggest that women in general are using more reliable methods of contraception than was the case five years ago. Amongst the various explanations which may be put forward to account for this is the fact that some reliable methods, such as the contraceptive pill and the loop, or intra-uterine device, are perhaps now more widely accepted and available.

However, another possibility suggested by the more prevalent use of reliable methods by later marriage and birth cohorts is that these women may be more concerned than earlier cohorts with limiting the number of children they have. However, we cannot draw inferences concerning the motives underlying the increased use of more reliable methods of contraception without the benefit of additional information about any corresponding changes over time in such factors as women's attitudes to children, and their employment history and aspirations. However, in the chapter on family size it was demonstrated that women interviewed in 1972 also had smaller ideal numbers of children, both for couples like themselves and those with no financial or other worries, than women of comparable ages and durations of marriage five years earlier. But although the increased use of reliable methods is consistent with these smaller ideals the use of reliable methods of contraception is in itself no guarantee that these methods will prove successful for the individual.

Previous studies and the previous chapters of this study have suggested that to be effective, contraception must be concerned with the way family planning is used as well as with the specific techniques used. The pill used erratically could be a less effective method of conception control than the safe period used carefully. Changes from one method to another with gaps during which coitus was unprotected or the taking of chances with unprotected coitus during periods of ostensibly using 'reliable' methods confound any interpretation of the effectiveness of family planning based solely on the techniques used.

As described earlier, information was collected on how contraception was used between the period of the 1967 and 1972 interviews. It was not possible at this stage to analyse the data in considerable detail but two summaries were drawn up illustrating the simplest aspects of contraceptive usage: the number of changes in technique the couple experienced in the period and whether or not the techniques were always used or whether the couple 'took chances' with any or all of the techniques that they were using. The summaries do not, of course, indicate at what point in the five-year period or before, conception control was begun nor, more importantly, do they relate to the stage in family building at which the couples find themselves. Greater effectiveness of family planning usage is probably more important where couples have or are approaching the number of children they want; 'taking chances' with technique of family planning is of lesser importance at the onset of family building. The term 'technique' has been used as distinct from 'method' because in a very small number of cases more than one method of family planning was used by the couple either simultaneously or as alternatives over a specific period. Thus, 'technique' refers to the use of either a single method or to more than one method where these were used together. Women who said they have never used any method of conception control were omitted from the analyses.

It should be emphasised that tables 5.22–5.24 refer only to the number of changes between techniques since the 1967 interview and these were not necessarily equivalent to the number of actual methods used. A hypothetical example serves to illustrate this point. A woman may have used only two methods of contraception between 1967 and 1972 but she could have changed from one method to the other and back again three or four times in the five-year period with which these tables are concerned, making three or four changes in technique.

Table 5.22 *Women married 1960–67 (excluding those who have never used any method of contraception)*
Number of changes in contraceptive technique 1967–72 (analysed by date of marriage)

Number of changes in contraceptive technique 1967–72	*All dates*	*Date of marriage*			
		1960–61	*1962–63*	*1964–65*	*1966–67*
	%	%	%	%	%
0	42	54	47	33	32
1	37	35	32	39	42
2	17	8	17	22	20
3 or more	4	2	4	5	5
Unclassified	*	1	—	1	1
Base	1,324	349	368	391	216

Table 5.23 *Women married 1960–67 (excluding those who have never used any method of contraception)*
Number of changes in contraceptive technique 1967–72 (analysed by age at marriage)

Number of changes in contraceptive technique 1967–72	*All ages*	*Age at marriage*			
		Under 20	*20–22*	*23–24*	*25 and over*
	%	%	%	%	%
0	42	37	40	45	53
1	37	37	38	35	34
2	17	19	17	16	12
3 or more	4	6	4	3	1
Unclassified	*	1	1	1	*
Base	1,324	392	549	186	197

Forty-two per cent of all those women married between 1960 and 1967 who had ever used contraception said that they (or their husbands) had not changed their technique of family planning between 1967 and 1972. A further 37 per cent had one change during this time, 17 per cent had two changes and only 4 per cent had changed between techniques three or more times. Women married more recently were less likely to have consistently used one technique since the previous interview (table 5.22); 54 per cent of women married between 1960 and 1962 had no changes in contraceptive usage between 1967 and 1972 and this proportion decreased with later dates of marriage to 32 per cent for women married between 1966 and 1967.

Women who married at younger ages were also proportionately more likely than women who married later in life to have changed their techniques of family planning in the last five years (table 5.23). Sixty-two per cent of women who married before the age of 20 had changed their use of contraception one or more times between 1967 and 1972 compared with 47 per cent of women married at the age of 25 or later. The more frequent changes in methods of family planning both by women who married more recently and those who married at younger ages suggest that these women are perhaps still experimenting with different methods to find one which suits them. However, it may also reflect the fact that women who married more recently, for instance, are most likely to have had children since the previous interview and the birth of a child provides a good opportunity or indicates a need to switch to another method of contraception. Table 5.24 demonstrates that the number of changes in contraceptive usage does increase with the number of children born since the previous interview. For example, less than one-quarter of these informants who had had two children since the previous interview had used a single technique throughout the period compared with 63 per cent of those women who had not had any children between 1967 and 1972. Moreover 45 per cent of women who had had two children since 1967 had changed their contraception techniques two or more times during that period. This suggests that changes in technique may occur as a response to a perhaps unexpected birth.

Table 5.24 *Women married 1960–67 (excluding those who have never used any method of contraception and women who have no living children)*
Number of changes in contraceptive technique 1967–72 (analysed by number of living children born since previous interview)

Number of changes in contraceptive usage since previous interview	*All numbers*	*Number of living children born 1967–72*			
		0	*1*	*2*	*3 or more*
	%	%	%	%	%
0	42	63	29	24	(35)
1	37	28	48	32	(35)
2	17	8	18	34	(20)
3 or more	4	1	4	9	(10)
Unclassified	*	*	1	1	—
Base	1,224	406	585	213	20

Tables 5.25 and 5.26 refer to the consistency of usage of the technique or techniques employed between 1967 and 1972. Sixty-one per cent of all women married between 1960 and 1967 who had used some form of conception control *said* they had used one technique, or a number of techniques, without 'taking chances' throughout the period 1967–72. For each of the techniques used at the time, the question was put: 'While you were using (METHOD) did you always use a method or did you sometimes take chances?' The summary referred to all the techniques used so that 'always used method' indicated that each method was consistently used without 'taking chances'. The proportion of women in this

category decreased with later dates of marriage: from 63 per cent of those married 1960–61 to 58 per cent of those married 1966–67. Taking chances was more frequent among those who had changed their technique of family planning and who took risks with one or more of those techniques although not necessarily the most recently used nor with them all.

Table 5.25 *Women married 1960–67 (excluding those who have never used contraception)*
Whether always used a method or 'took chances' (analysed by date of marriage)

Whether always used a method or 'took chances'		*All dates*	*Date of marriage*			
			1960–61	*1962–63*	*1964–65*	*1966–67*
		%	%	%	%	%
Did not change technique 1967–72 and	always used method	29	37	34	23	20
	sometimes 'took chances'	8	10	8	6	7
	insufficient information	3	4	2	2	3
Changed technique 1967–72 and	always used method employed at the time	32	26	29	36	38
	always used some, 'took chances' with others	16	11	15	19	22
	'took chances' with all techniques	1	—	1	3	—
	insufficient information	8	8	8	9	8
	No answer	3	4	3	2	2
Base		1,324	349	368	391	216

Table 5.26 *Women married 1960–67 (excluding those who have never used contraception)*
Whether always used a method or 'took chances' (analysed by age at marriage)

Whether always used a method or 'took chances'		*All ages*	*Age at marriage*			
			Under 20	*20–22*	*23–24*	*25 and over*
		%	%	%	%	%
Did not change technique 1967–72 and	always used method	29	23	30	31	37
	sometimes 'took chances'	8	8	7	7	9
	insufficient information	3	4	1	4	3
Changed technique 1967–72 and	always used method employed at the time	32	31	34	31	28
	always used same, 'took chances' with others	16	20	17	13	9
	'took chances' with all techniques	1	2	1	—	—
	insufficient information	8	9	7	9	11
	No answer	3	3	3	5	3
Base		1,324	392	549	186	197

Moreover, as table 5.22 showed, women who married more recently were less likely to have used one method consistently between the 1967 and 1972 interview. For example, 38 per cent of those married between 1966 and 1967 had changed technique between 1967 and 1972, but always used the method employed at the time, compared with 26 per cent of those married 1960–61. But proportionately twice as many of the most recent marriage cohort had changed techniques, and sometimes 'taken chances', than those married 1960–61. However, this is more likely to be a consequence of the stage in the family building process than any fundamental change in contraceptive practice between women married more recently and those married earlier. Those married more recently were less likely to have completed their families and to have less reason for being consistent in their use of family planning. There may also have been an element of experimenting with methods among those who intended in any case to have more children.

Women who married at younger ages were also more likely to have changed techniques between 1967 and 1972, and to have sometimes 'taken chances', than women who married at later ages (table 5.26). Thirty-one per cent of women aged under 20, and 34 per cent of those aged 20–22 at marriage, had changed technique, but always used the method employed at the time, between 1967 and 1972 compared with 28 per cent of those aged 25 and over. However, the proportion who had always used some methods and taken chances with others was 20 per cent, 17 per cent and 9 per cent respectively. Age at marriage made little difference to the proportion who had not changed technique between 1967 and 1972, but had sometimes taken chances: these varied between 7 per cent and 9 per cent. Taking chances with contraception, where it was used at all, was a characteristic of those who married young.

5.6 Planning circumstances of births since the 1967 interview

The extent to which family planning had been effective was investigated by collecting information on the circumstances in which births had taken place between the two interviews. The analysis was confined to recent births since there is evidence[1] to suggest that there is a measurable degree of unreliability in the responses of women to questions on contraception. Restricting the analysis to the circumstances of births within five years of the follow-up interview seemed likely to reduce the unreliability. Question 16 asked about the circumstances in which the pregnancies resulting in each living child born between the 1967 and 1972 interviews had occurred. Three pre-coded categories were presented to the women experiencing such pregnancies and they were asked for each pregnancy which category best described the circumstances. The categories distinguished between pregnancies which had occurred as a result of deliberately stopping family planning, as the result of an 'accident' or before the couple started family planning. A summary of the information was compiled by amalgamating the answers for all the pregnancies to each woman. Women who had never been pregnant, those with no living children at all and those with no living children since the previous interview were excluded from the summary. The remaining 795 women who had had children since the previous interview in 1967 were classified in one of six ways. The first group included those informants whose births since the previous interview were all planned. Women who had not planned any of their births between 1967 and 1972 were in the second category and the third category included those whose births since the previous interview all occurred before the use of family planning. The next category contained informants who said that all their births since the previous interview were either planned or occurred before the use of family planning. Women whose births were all either unplanned or occurred before the use of family planning were included in the fifth category and the final category contained those whose births since the previous interview occurred under all the previously described circumstances.

Sixty per cent of women married between 1960 and 1967 who had had children between the 1967 and 1972 interviews said these births had been planned particularly if the women had no more than two children by 1972; the births of a further 18 per cent of women were unplanned in this period while 13 per cent said that all their births had taken place before they or their husbands had used family planning. There were considerable differences according to parity.

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[1] N B Ryder and C F Westoff op. cit.

Table 5.27 *Women married 1960–67*
Those who have had living children since the previous interview in 1967
Planning circumstances of births since 1967 interview (analysed by number of living children in 1972)

Planning circumstances	*All numbers*	*Number of living children 1972*			
		1	*2*	*3*	*4 or more*
	%	%	%	%	%
Births since last interview all planned	60	72	74	38	22
Births since last interview all unplanned	18	10	9	35	41
Births since last interview all occurred before the use of family planning	13	18	11	9	20
Births since last interview all planned or occurred before the use of family planning	2	—	2	3	1
Births since last interview all unplanned or occurred before the use of family planning	2	—	1	2	4
Births since last interview under all circumstances	5	—	2	13	12
Base	795	130	408	181	76

Women with one or two children in 1972 were more likely to have had planned births in this interval, the more recent births of those with three or four children in 1972 were, not surprisingly, likely to have been unplanned. In the case of those with four children, a fifth of the women indicated that their later births had occurred before they had used any method of conception control.

5.7 The future use of family planning

Women married between 1960 and 1967 were more likely to be using reliable methods of contraception in 1972 than they had been using five years previously in 1967. Moreover a higher proportion of these women were using reliable methods than women of comparable ages and durations of marriage five years earlier.

However, in view of the finding that women with larger families were less likely to have planned all their pregnancies between the two interviews it is helpful to have some indication of future family planning intentions, especially for the later marriage cohorts and those who had smaller families in 1972. From the answers to questions on the specific individual methods they thought they would use 'in the next five years', a summary of the future use of family planning in 1972 was compiled and individual women were classified:

Used/last used reliable methods	: and will continue
	: and will use sterilisation
	: and will not continue with them.
Used/last used less reliable methods	: and will use reliable methods in future
	: and will use sterilisation in future
	: and will continue with less reliable methods or will use none at all.
Never used contraception	: and intends to use reliable methods in future
	: and intends to use sterilisation
	: 'Don't know' or does not intend to use contraception.

The women themselves were not asked whether they would use 'reliable' methods in the future; they were asked which of the listed methods they would use in the next five years. The division into 'reliable' and 'less reliable' methods was made in the same way as that for current usage.

Couples who had had a sterilising operation have been excluded from the tables discussed in this section. Eighty-two per cent of all the remaining women said that they intended to use what we have classified as reliable methods of family planning in the future. Seventy-four per cent were already using these methods in 1972 and the remaining 8 per cent were using less reliable methods or none at all.

Table 5.28 *Women married 1960–67 (excluding those who have had an operation/injury by 1972 preventing conception)*
Future use of family planning 1972 (analysed by date of marriage)

Future use of family planning 1972	*All dates*	*Date of marriage*			
		1960–61	*1962–63*	*1964–65*	*1966–67*
	%	%	%	%	%
Used/last used reliable methods and:					
will continue	74	72	70	77	75
will use sterilisation	1	*	1	1	*
will not continue with them	3	3	4	4	4
Used/last used less reliable method and:					
will use reliable methods in future	7	6	7	7	9
will use sterilisation in future	1	*	1	*	1
will continue with less reliable methods or use none at all	10	14	12	8	5
Never used contraception and:					
intends to use reliable methods in future	1	1	1	1	1
intends to use sterilisation	*	*	—	—	—
Don't know or does not intend to use contraception	3	3	4	2	5
Base	1,214	297	337	367	213

Table 5.29 *Women married 1960–67 (excluding those who had had an operation/injury by 1972 preventing conception)*
Future use of family planning 1972 (analysed by age at marriage)

Future use of family planning 1972	*All ages*	*Age at marriage*			
		Under 20	*20–22*	*23–24*	*25 and over*
	%	%	%	%	%
Used/last reliable methods and:					
will continue	74	78	76	68	65
will use sterilisation	1	1	*	1	*
will not continue with them	3	3	4	2	3
Used/last used less reliable methods and:					
will use reliable methods in future	7	7	8	8	5
will use sterilisation in future	1	1	1	1	—
will continue with less reliable methods or use none at all	10	7	8	16	17
Never used contraception and:					
intends to use reliable methods in future	1	1	*	1	2
intends to use sterilisation	*	—	—	—	*
Don't know or does not intend to use contraception	3	2	3	3	7
Base	1,214	352	496	169	197

The future use of family planning is analysed by date of marriage in table 5.28. Higher proportions of those women who married in 1964 or later intended to use reliable methods in the future than women married between 1960 and 1963. Eighty-five per cent of these more recently married women said in 1972 that they would use reliable forms of contraception compared with between 78 per cent and 79 per cent of those women married before 1964 who were 'at risk' from conception.

Table 5.29 gives the distribution of the future use of family planning analysed by age at marriage. Women married under 20 years of age were proportionately more likely than any of the other sub-groups to say that they would use reliable methods in the future. A total of 86 per cent intended to continue with, or change to, reliable methods of contraception and this proportion decreased steadily with age-at-marriage to 72 per cent for women married at the age of 25 or later. Twenty per cent of these women intended to use less reliable methods in the future and 7 per cent had never used contraception and were unsure or intended to use none at all in the future.

The majority of women in each date-of-marriage and age-at-marriage sub-group were using or had last used reliable methods in 1972 and expressed their intention to continue with these methods. However, a considerable proportion of those using the less reliable methods also intended continuing with them. Of those using less reliable methods equal proportions of women who were aged 22 and under at marriage intended either to use reliable methods in the future or to continue with less reliable methods or none at all. But proportionately twice as many women aged 23–24 at marriage, and more than three times as many women aged 25 or over, said that they would continue with less reliable methods or use none at all than intended to change to reliable methods.

Similarly more than twice as many of those women married between 1960 and 1961 who were or had been using less reliable methods intended to continue with them or use none at all than women who intended to change to reliable methods. However, these figures are reversed for those women married between 1966 and 1967 who were using, or had last used, less reliable methods in 1972. Proportionately twice as many of these informants intended to use reliable methods in future than those who said they would continue with less reliable methods or use none at all.

Table 5.30 *Women aged 21–34 in 1972 (excluding those who have had an operation/injury preventing conception)*

Future use of family planning 1972 (analysed by wife's age last birthday)

Future use of family planning 1972	*All ages*	*Age last birthday*				
		21–24	*25–27*	*28–29*	*30–32*	*33–34*
	%	%	%	%	%	%
Used/last used reliable methods and:						
will continue	74	72	79	78	70	72
will use sterilisation	1	—	1	1	1	*
will not continue with them	3	9	1	3	5	2
Used/last used less reliable methods and:						
will use reliable methods in future	8	4	9	8	6	8
will use sterilisation in future	1	2	1	—	1	1
will continue with less reliable methods or use none at all	10	7	5	7	14	14
Never used contraception and:						
intends to use reliable methods in future	1	—	1	*	*	1
intends to use sterilisation	—	—	—	—	—	—
Don't know or does not intend to use contraception	2	6	2	3	3	2
Base	1,277	54	274	239	398	296

Not surprisingly women aged 30 or over, as well as those who married earlier and those who married at later ages, more frequently intended to use less reliable methods of contraception in the future than did younger women. However, 22 per cent of informants who were aged 21–24 in 1972 said that they would use less reliable methods or none at all in the future compared with only 8 per cent of women aged 25–27 and 13 per cent of women aged 28–29 in 1972. A possible explanation is that women aged 21–24 are less likely to have completed their families than older women and are therefore less concerned with preventing accidental pregnancies. But this is presumably not the reason why 21 per cent of women aged 30–32 in 1972 and 18 per cent of women aged 33–34 who were apparently 'at risk' said that they would use less reliable methods or none at all in the future. Possibly, experience of these methods allied with relative infecundity led them to believe that continuing to use what are apparently 'less reliable' methods would be effective in their cases.

Table 5.31 *Women married 1960–67 (excluding those who have had an operation/injury by 1972 preventing conception)*
Future use of family planning 1972 (analysed by number of living children 1972)

Future use of family planning 1972	*All numbers*	*Number of living children 1972*					
		0	*1*	*2*	*3*	*4 or more*
	%	%	%	%	%	%
Used/last used reliable methods and:						
will continue	74	50	67	79	83	63
will use sterilisation	1	—	—	1	—	2
will not continue with them	3	10	4	2	3	5
Used/last used less reliable methods and:						
will use reliable methods in future	7	2	10	8	4	9
will use sterilisation in future	1	—	1	*	1	2
will continue with less reliable methods or use none at all	10	8	14	9	9	19
Never used contraception and:						
intends to use reliable methods in future	1	4	1	*	—	—
intends to use sterilisation	*	1	—	—	—	—
Don't know or does not intend to use contraception	3	24	3	1	—	—
Base	1,214	115	243	595	200	57

Table 5.31 gives the future use of family planning in 1972 in relation to the number of children for women married between 1960 and 1967 who were still able to have children in the future. The proportions of women who were using, or had last used, reliable methods in 1972 and intended to continue with them increased from 50 per cent for childless women to 83 per cent for women with three children but then decreased to 63 per cent for women with four or more children. Nineteen per cent of women with four or more children who were using, or had last used, less reliable methods in 1972 said that they would continue with these methods or use none at all and a further 5 per cent who were using, or had used, reliable methods did not intend to continue with them. Altogether 87 per cent of women with two or three children intended to use reliable methods in the future. Women with two or three children were least likely to say that they would use less reliable methods, or none at all, but a total of 43 per cent of childless women and 22 per cent of women with one child did not intend to use reliable methods of contraception in the future. Proportionately more women with two or three children were currently using, or had used, reliable methods in 1972 (table 5.12) and women with two children were also more likely to have planned all their births since the previous interview (table 5.27).

Table 5.32 *Women married 1960–67 (excluding those who had had an operation/injury preventing conception and women who had never used any method of contraception)*
Contraceptive methods to be used in the future (analysed by contraceptive methods ever used)

Contraceptive methods will use	*All*	*Contraceptive methods ever used*											
		Sheath	*Contra-ceptive pill*	*Husband withdraws*	*Cap with jelly or cream*	*Safe period/rhythm method*	*Loop/coil/IUD*	*Jellies/creams/supposi-tories/pessaries/foam/Emko*	*Douching*	*Abstinence*	*Cap used by itself*	*Other*	*No answer*
	%	%	%	%	%	%	%	%	%	%	%	%	%
(1) Sheath	41	55	23	32	24	40	11	35	(29)	(7)	(30)	—	(24)
(2) Contraceptive pill	39	36	65	36	43	35	13	33	(52)	(29)	(40)	(50)	(29)
(3) Husband withdraws	15	11	7	38	5	20	1	9	(19)	(29)	(5)	—	—
(4) Loop/coil/IUD	14	13	14	13	19	11	81	26	(5)	(21)	(15)	—	(6)
(5) Cap with jelly or cream	6	6	4	3	29	4	3	13	(5)	(7)	(20)	—	—
(6) Safe period/rhythm method	6	4	2	8	2	35	—	6	(14)	(7)	—	—	(24)
(7) Jellies/creams/suppositories/pessaries/foam/Emko	3	4	3	3	3	4	2	32	—	—	—	—	—
(8) Cap used by itself	1	1	4	1	1	1	2	13	—	—	(20)	—	—
(9) Douching	*	*	—	*	—	—	—	—	(10)	(7)	—	—	—
(10) Abstinence	*	*	*	1	—	1	—	—	—	(7)	—	—	—
(11) Other answer	7	8	10	8	6	9	11	9	(14)	(7)	(5)	(50)	(6)
No answer	3	2	3	4	2	3	5	2	(10)	(14)	(10)	—	(29)
Base	1,185	852	590	438	212	195	103	89	(21)	(14)	(20)	(2)	(20)

Childless women were less likely to have used, or be using, reliable methods of contraception, but the incidence of infecundity was also relatively high among these women (see the previous section). And 36 per cent of women with larger than average families (four or more children) said in 1972 that it would be 'impossible' to have further children because they or their husbands had had a sterilising operation. Thus the less frequent intention to use the more reliable methods of conception control by the childless was related to both infecundity and the fact that their families were unlikely to be complete. But among those with four or more children, there remained a considerable proportion who intended to continue with the less reliable methods of contraception even taking into account those who have been or intend to be sterilised.

Finally, when the data were analysed by the actual methods of contraception the women said they intended to use in the future, the sheath remained the most frequently mentioned, closely followed by the contraceptive pill. None of the other methods were mentioned by more than 15 per cent of the respondents.

5.8 **Summary**

The use of reliable methods of contraception such as the pill, the loop and the sheath has been shown to vary with both age and date of marriage. Women who married in 1964 or later were proportionately more likely to be using, or to have last used, reliable methods when interviewed in 1972 than women who married between 1960 and 1963. However, proportionately twice as many women in the earlier marriage cohorts said in 1972 that they were unable to have children in the future. The use of less reliable methods of contraception, or none at all, was proportionately greater for couples in which both husband and wife were Catholic and for couples where the husband was in a manual occupation.

Women who had two or three children were more likely than women without children, or those with only one child, to say that they were using, or had last used, reliable methods of conception control in 1972. Women of higher parities were less likely than women with two or three children to be using reliable methods but more than one-third of all such women with four or more children had had (or their husbands had had) sterilising operations. Women with three or more children had had proportionately fewer planned births since 1967 than women of lower parities and women married between 1960 and 1963 and those who were married before 20 or at the age of 25 or later, were also less likely to have planned all their births since the previous interview than women married between 1964 and 1967 and those who married between the ages of 20 and 24. However, women who married before the age of 20 were proportionately more likely to say that they would use reliable methods in the future than any of the other age-at-marriage groups. There is also some evidence to suggest that women with two children in 1972 had been more successful in their past use of family planning than women of other parities.

In general, however, women married between 1960 and 1967 were using, or had last used, more reliable methods of contraception in 1972 than they had been using five years previously and the greatest change from less reliable to reliable methods between 1967 and 1972 had taken place for women who indicated that their families were probably complete.

Women interviewed in 1972 were also more likely to be using, or have used, reliable forms of contraception than women of comparable ages and durations of marriage in 1967. Proportionately twice as many of those women who were interviewed in 1967 said that they had never used contraception compared with women interviewed in 1972. Conversely, women married between 1960 and 1967 or those who were aged 21–34 in 1972 were much more likely to have had a sterilising operation than women of comparable durations of marriage and ages in 1967.

Therefore the women interviewed in 1972 are not only using more reliable methods of contraception than they were in 1967, but are also using these methods, and sterilisation of the wife or husband, to a greater extent than women of comparable ages and durations of marriage five years previously.

6 Conclusions

6.1 The assumptions implicit in fertility forecasting

Before discussing in detail the conclusions which can reasonably be drawn from this study, it would seem profitable to consider the assumptions which are inevitable in setting up and carrying out any research project. These assumptions set limits to the kinds of conclusions which can be drawn and point up possible alternatives.

The main object of the current research was to assess the value of using the answers to questions on the number of children women expect to have as an indicator of likely changes in fertility behaviour or as a surrogate for final family size. The more usual method of inferring fertility changes is to project into the future such changes in the main fertility measures (completed family size, for example) as had occurred in the recent past. This is usually done on a national basis or for large groups and the search is then for groups whose fertility behaviour is virtually constant or predictable over time. 'The ideal situation would be where it was possible to divide the population into sub-classes for which change over time was so regular that prediction would become a formality . . .'.[1] The changes in fertility are assumed to be internal to the processes of fertility measurement themselves and little acknowledgement except in an impressionistic way is made of the individual behaviour of couples or of their group reactions to external events in influencing fertility behaviour. The criticism of this method that there is no satisfactory way of setting limits to such projections since it is unlikely that any past movements will continue indefinitely is countered by suggesting that assumptions of cyclic movements would be appropriate, based on some central value which would be socially determined but would change slowly.[2]

An alternative method, which is the basis of this and other studies[3] is to assume that changes in fertility in a particular period derive from the total actions of individuals and that one way of assessing such changes is to ask the individuals concerned what their future actions are likely to be. Asking people—in this case married women—how many children they expected to have altogether assumes first of all that there exists an element of choice in the matter and with the possibility of more efficient conception control methods reaching more people this assumption has increasing force. Certainly very few societies, and that included in this study is not one, have had children to the limit of their reproductive capacity. Further, it assumes a rationalistic approach to family building on the part of parents; that they—or in this case, the wife—approach marriage with a certain predisposition towards families of a certain size and with some view about how this is to be achieved in terms of the length of time devoted to child-bearing. This is not to say that this view remains unchanged throughout but that the initial strategy has an effect which is present throughout the remaining years of fecundity.

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[1] W Brass, Perspectives in population prediction, *Journal of the Royal Statistical Society*, Series A Vol 137 Part 4 1974.

[2] Brass op. cit.

[3] For example, The Growth of American Families Study, of which the last phase was reported in N B Ryder and C F Westoff op. cit.

This contrasts with two other views of the family building process which basically question the idea of any overall strategy and therefore deny the possibility of making statements about future fertility changes based on the parents' opinions. The first of these—an extreme view in the case of low-fertility societies—regards family building as a process in which children are born to married women at the rate of one every two years, say, and any departure from this can be accounted for by changes in what Davis and Blake[1] have called the 'intermediate variables'—those relating to the likelihood of exposure to conception and to factors affecting foetal mortality. In this case, family building is viewed as a negative process of attempting to avoid children without any positive aim or forward plan. The other notion is similar and conceives of the process of family building as a 'terminating' model. In this each fertility event is viewed as one which the respondent wished or did not wish to occur, so that the process of family building is without any overall strategy and is envisaged as a reaction to day-to-day events. One version has been expressed in terms that '. . . individuals discover, by reaching it, the family size at which they wish to cease childbearing',[2] though it is not clear to what extent any such decision made by couples could be considered irrevocable and hence final.

6.2 The model assumed in this study

Thus it is clear that it is only within the framework of a model which presented the possibility of couples having an overall strategy of family building that their views of the number of children they expected, intended or desired would have any predictive value. The evidence that couples do come to marriage with some preference is presented in a number of studies.[3] There is also the evidence from the first phase of this study when 89 per cent of the 6,300 women interviewed not only said that when they married they wanted to have children but also could give a number that they wanted at that time. Furthermore, 80 per cent said that they had discussed the matter with their husbands. Although there may well be an element of rationalisation after the event in these answers, particularly for those women who had been married for some time, it would be difficult to argue that there was not a substantial group of women to whom the answers were meaningful. In any case, the fact that after the event, almost all women felt constrained to say that they had had views about the family size they wanted at marriage suggests that this is a factor which plays some role in family formation. In addition, there is evidence from this study that the number of children women expect early on in marriage is directly related to the lengths of the intervals between children and that the statements about their expectations occurred, in the main, before their second and possibly their first children had been born. Thus the sequence of events is from statements about expectations to differing internatal intervals which suggests that there exists a general plan of family building which even has an effect on interval length.

Three aspects of the model of family formation used in this study are considered below.

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[1] K Davis and Judith Blake, Social Structure and Fertility: an analytic framework, *Economic Development and Cultural Change* Vol 4 (1956).

[2] J Simons, Review of the Later Years of Childbearing by L Bumpass and C F Westoff, *Population Studies 28* (1974).

[3] Gustavus and Nam op. cit. C F Westoff, E G Mishler, E L Kelly, Preference in Size of Family and Eventual Fertility Twenty Years After, *American Journal of Sociology* March 1957.

a. *Cohort and period analyses*

If some general plan of family formation can be said to exist at marriage, even though it may be modified later, this also implies the use of cohort rather than period type analyses of the data in this study. Analysis by cohort which in fertility studies usually means a group of women either born or married at the same time—assumes that the event which distinguishes one cohort from another is of significance in accounting for variations in fertility. In this study, it is presumed that the date of marriage and the life-experiences which are crystallised in that fact have a greater importance in accounting for differences in family formation than do any day-to-day experiences. Period analyses, centred around dates which categorise the dependent variable—the dates of birth of individual children—imply that it is events connected with that date of birth which are important in accounting for fertility changes. It is perhaps worth adding that the choice of marriage rather than birth cohorts as the main analytic category—though made because marriage cohorts are more complete than birth cohorts when studies are based on surveys confined to married women, particularly at the younger ages—implies that it is the date of marriage rather than the date of birth of the woman which is of greater consequence in family building: that it is of significance that marriages take place at a particular time and that it is the events which occur at that time which set the general strategy. In the event, the results of this study suggest that this model is too simple. Whereas the number of children women expect seems to be borne out in practice within fairly narrow limits, so that the initial plan has some influence through the main child-bearing years, the timing of the births appears to be relatively more influenced by day-to-day events. The evidence from this study suggests that events occurring in about 1968–69 in particular led to a delay in births, regardless of their parity and regardless of marriage cohort. This suggests, in turn, that the prediction of the timing of births is less likely to be successful unless these events which influence the timing of births can themselves be successfully predicted.

b. *Model of family formation*

This then brings us on to the central issue of what it is that is assumed:

i. to influence the views of couples about the size of their family
and
ii. to bring about changes or modifications in those views.

At this point, the model which delimits the possible conclusion from this research study becomes plausible but not definitive.

For this particular study, it has been assumed that three factors influence final family size:

i. the norms prevailing in a community
ii. the individual's (in this case, married women's) reactions to the idea of motherhood and the value of having children
and
iii. the organisation and characteristics of the family unit which allow the norms and individual benefits (or disadvantages) to be realised or modified. For example, the norms and values may favour a larger family but a couple's view of economic circumstances epitomised by the husband's socio-occupational status may bring about a reduction in family size. Similarly, infecundity or the couple's ability to voluntarily control their fertility may affect their aims.

c. *Expected family size*

To represent final family size for families which were incomplete, the concept of expected family size was used. Expected family size was preferred to desired or intended family size because it made specific our aim of trying to get women to be realistic about the number of children they would have taking into account the possibility of contraceptive failure and any beliefs they might have about their fecundity. In practice, a proportion of women appeared to over-emphasise what they believed to be their infecundity and underestimated the number of children they expected to have at the initial investigation. Nevertheless, it was felt that some such provision needed to be made. To ask women how many children they *intended* to have altogether makes no allowance for those of their current children who were not intended. Desired family size appeared to be akin to ideal family size since it conveyed an impression of family formation unconstrained by either mechanistic factors or by other external events.

6.3 The use of expected family size for forecasting fertility

The problem of using expected numbers of children as predictive of final family size is that couples may modify their views as time passes; this appears to be particularly so for those who are in the early phases of marriage and less so for those whose expected final family size is made up largely of children they already have. This raises the question of the appropriate point in time for making the prediction. At the longer durations of marriage, expected family size consists increasingly of the number of living children. Barring extra unwanted births which at the longer durations are relatively infrequent and become increasingly less likely, the prediction of final family size from the stated number of children expected becomes increasingly 'successful' at these durations. However, its value for practical purposes is diminished. There is very little value in using the surrogate index if the real measure will soon become available. So the 'success' of any prediction is a function of the distance in time from the outcome that the prediction is made. The need is to balance the probability of making a successful prediction against the practical disadvantages of making a prediction too close to the event.

Evidence from this study suggests that predictions made early on in marriage are subject to considerable variation and that about half the women married less than five years in 1967 had different expectations when interviewed in 1972. Particularly among those married two years or less, the number of children expected was reduced and this would appear to be related to experience of child-bearing and rearing as well as to a growing awareness of infecundity on the part of some. It was those women who initially expected three or four children although without any or with only one who were most likely to have reduced the number of children they expected. Admittedly their scope for reducing the number of children they expected was greater than for women who initially expected only two, given the norms prevailing in the community. However, this does suggest that to reduce the variation in expected numbers of children brought about by the modification of views early on in marriage, the use of the number of children expected as a surrogate for final family size would be more effective after five years of marriage. This would reduce its immediate practical value since five years is a significant proportion of the period effectively devoted to child-bearing. However, the construction of a series based on expected numbers of children after five years of marriage would indicate the *changes* in women's thinking on the subject and this, together with the number of children actually born within five years of marriage, would provide additional information on which to base fertility projections.

Reference was made earlier to the norms prevailing in the community. To give changing expectations a reference point, it would seem reasonable to measure changes in expected numbers of children against changes in what are considered to be acceptable family sizes in the community. If expected numbers of children reflect short-term changes affected by day-to-day events as well as the effects of involuntary and voluntary fecundity limitation, there is a need to gauge whether the variations in expected numbers are temporary changes or symptomatic of a more fundamental movement. A measure of the significance of the fluctuations could be made by reference to changes in the number of children considered ideal. If both measures were declining, as in the data studied in this investigation, there would be increased confidence in what was likely to be happening in the future. On the other hand, movements in expected numbers of children which differed from those in ideal numbers would indicate something less than a fundamental change in family building.

6.4 Changes in expected numbers of children

It is important, within the context of fertility forecasts made in this way, to consider why it is that expected numbers of children do vary. If the measure does fluctuate arbitrarily or in response to minor changes in events, its value for prediction purposes is diminished. On the other hand, if the fluctuations appear to be due to the uncertainties about child-bearing which are inevitable at the outset of a marriage, then after these uncertainties were resolved, the measure would stabilise and have a predictive value. This question can only be partly resolved from the study since women were not asked directly what had brought about the changes in expectations where this had occurred. However, analysis of the data does suggest that a considerable factor in changing expectations was 'mechanistic' reasons associated with a lack of experience early on in marriage rather than changes of mind due to reactions to external events. Apart from the point made earlier, that those most likely to have changed their views early on in marriage were those who said they expected larger families although having little experience of children, those who had exceeded the number of children they expected at the longer durations were those who had thought that they were relatively infecund and who, therefore, set their expectations low. Over 40 per cent of women who initially expected none or only one child in 1967 had had more than that number by 1972 (Section 3.7) and a considerable proportion of these women had, mistakenly, thought themselves relatively infecund in 1967. Among those who were presumably unaware of any fecundity problems and expected two children in 1967, 68 per cent expected in 1972 the same number, while just over a fifth either had or expected more than two children and 10 per cent expected fewer. At the durations of marriage studied in this investigation, the extent to which expectations had changed because the couples had more children after they had considered their families complete was of the order of 24 per cent of couples who expected and had already had two children and 31 per cent of those who expected and already had three. To what extent the increase was intentional or accidental is not easily gauged from the study. Certainly the proportion of these couples who had obviously changed their minds because their expectations had increased whereas the number of children they actually had, had not, was of the order of 2–3 per cent. The remainder may be due to accidents. Perhaps surprisingly, the sexes of the children born seemed, relatively, of lesser consequence in bringing about a change in the number of children expected.

6.5 Limitations of expectation studies

The conclusions presented above have been put in very general terms since there may be a danger in appearing to claim too much for them. Because of the size of samples and of the non-response which is unavoidable, it is unlikely that the precision of estimates of actual fertility and, by association, expected fertility can ever match that obtained by registration data, although the discrepancies are not unreasonably large where comparisons can be made. At their best, the data on expectations can present a measure of trends and of changes and not of absolute values. In this sense, they provide an additional tool for gauging future movements in fertility in general terms. Their greatest limitation is that the data are much less reliable and specific on *when* women expect to have their future children. In the context of declining parities, changes in the timing of births assume a much greater importance in accounting for changes in the fertility rates. For practical purposes, the quantity of children born per unit period is the measure of greatest value. At best the study of the numbers of children expected can indicate the direction in which that measure is likely to go and provide some explanation as to the reason why it is likely to go in that direction.

Since the timing of births seems to be much more responsive to external events and hence less predictable either by methods internal to the processes of fertility or by methods which rely on the views of individuals about their future family building, the detailed study of such possible events in conjunction with the dates of births of the children would seem more fruitful. Since the significant event in explaining changes in timing is the date of conception or, for practical purposes, its measurable equivalent, the date of birth (for live births), it would seem more fruitful to investigate fluctuations in intervals primarily in relation to the terminating date with birth order as a second control. However, this is of limited value when based on studies which set an upper age limit to the sample investigated since the later births of women excluded from the study would have coincided in time with the earlier births of the younger women included. Thus the analyses by dates of terminating births would be incomplete for the earlier years. The same kind of problem would affect all parity specific samples which tried to provide an explanation for changes in the timing of births. The same problem but in an opposite direction affected the present study since it was not possible to include the children born within marriage which took place between 1967 and 1972. Hence, the data on timing although strongly suggestive of its responsiveness to external events are not conclusive. Although the subject will not be pursued here, this does suggest that different models and different research designs may be more appropriate for the study of the timing of births.

6.6 The descriptive aspects of the study

To complete the conclusions, reference should be made to the other aspects of this study: to the descriptions of changes in opinions about family size, fecundity and conception control which capitalised on the recall design of the research. This allowed the more detailed and personal information which can be obtained from surveys to be allied to the kinds of analyses more often associated with registration data. Thus changes can be traced for the same women and, of particular importance for fertility data, for women at the two periods of time standardised for marriage duration. Thus changes which are independent of the length of time couples have been married can be assessed. The substantive changes which have occurred between the two phases of the investigation in 1967 and 1972 are discussed in the relevant chapters of the study. The significance of these changes in the long term could only be assessed by further phases of a longitudinal research programme.

Appendix A

1972 Questionnaire

Area ☐☐☐☐☐

Address ☐☐☐

RECORD DATE OF PREVIOUS INTERVIEW ______________ 19____

RECORD DATE OF PRESENT MARRIAGE ______________ 19____

Inf ☐

TO ALL

1. First, I would like to ask you about your household and a little about your housing.

   a) OBTAIN HOUSEHOLD DETAILS BY STANDARD PROCEDURE. TICK H/W AND HOH

   b) OBTAIN DATES OF BIRTH OF INFORMANT AND HUSBAND.

   If any children under 18 in household

   c) OBTAIN NAMES BY WHICH CHILDREN IN HOUSEHOLD ARE KNOWN

   d) OBTAIN AGES (LAST BIRTHDAY) OF THOSE UNDER 18 YEARS IN HOUSEHOLD TICK REMAINDER.

	a) Relationship to Informant		a) TICK a) H/W	HOH	c) Names of children	b) and d) Date of Birth/Age	OFF. USE
1	Informant						
2	Husband						
						Ages of Under 18s	
3							
4							
5							
6							
7							
8							
9							

If born before July 1927 close interview

ACTUAL DATE OF BIRTH

AGE LAST BIRTHDAY OF THOSE UNDER 18 YEARS.

TICK REMAINDER

INT:- use line 2 above only for husband. If he is absent delete entire line and record reason for husband not being member of household at present time.

e) Reason.........

IF INFORMANT AND HUSBAND PERMANENTLY SEPARATED: CLOSE INTERVIEW

IF NON-RESPONSE GIVE ESTIMATED NUMBER OF CHILDREN NAMED PERSON HAS NOW...

Number ____

D.K. 99

CONSULT HOUSEHOLD BOX (Q.1)
IF INFORMANT OR HUSBAND IS H.O.H. (TICKED) ASK Q.2A
OTHERWISE ASK Q.2B

2. A. Do you own this house/flat or do you rent it?
B. Does your (MENTION RELATIONSHIP OF HOH) own this house/flat or does he/she rent it?

CODE ONE

Owns/is buying	1	
Rents.........	2)	Ask a)-c)
Rent free.....	3)	
Other specify.	X	

If rents (2 or 3)

a) Do you / Does he/she } rent the accommodation furnished or unfurnished?

Furnished..	4
Unfurnished	5

b) Does the accommodation go with the present job of anyone in your household?

Yes	6
No	7

c) Do you rent your accommodation...

RUNNING PROMPT

from the Council or New Town Corporation	1
or from a Friend or relative............	2
or from Someone else?.................	3

		a) LET/ SUB-LET	b) SHARED
3. a) How many bedrooms do you have, including bed-sitting rooms and spare bedrooms? ENTER NUMBER→	____		
b) Are any of them used for cooking like a bed sitting room for example? YES	1		
NO	2		
4. What other rooms do you have? ENTER BELOW, INFORMANT'S NAMES FOR ROOMS BUT EXCLUDE BATHROOMS, LAVATORIES, GARAGES AND ROOMS USED ENTIRELY FOR BUSINESS			
NAME OF ROOM		RING	
....	1	1	1
....	2	2	2
....	3	3	3
....	4	4	4
....	5	5	5
....	6	6	6

May I just check .....

5. Do you let or sub-let any of the rooms you have told me about to another household?

No ... X
Yes ... 0 RECORD IN COL.a)

6. Do you share any of the rooms you have told me about with any other household?

No ... X
Yes ... 0 RECORD IN COL.b)

NOTE: IF A ROOM IS BOTH LET/SUB-LET AND SHARED CODE ONLY IN COL. a) AS LET/SUB-LET.

Now can we talk about families.

7. Thinking about couples more or less like yourselves, what do you think is the ideal number of children for them to have nowadays? ____ children

8. And what do you think is the ideal number of children for a couple in this country, nowadays, supposing they had no particular worries about money or anything like that? ____

   a) Why do you think that (NUMBER MENTIONED IN Q.8) is the ideal number of children if families have no particular worries about money?

I'd like to read out some statements women have made about families and children.

9. I would like you to tell me whether, on the whole, you feel the same way as the views expressed in these statements or not.

The (first, next) statement is ...... (PROMF. a)-q) BELOW IN TURN) .... Do you feel the same way or not?

(PROBE: "What do you think, on the whole?")

	Feels the same way	Does not feel this	D.K. No personal knowledge Can't say
a) Given the choice, most women would not be without children.............	3	1	2
b) Children tie you down too much............	3	1	2
c) Sometimes, women feel they simply must have another baby....................	3	1	2
d) If you keep on having babies, you have no time for yourself.............	3	1	2
e) Having children is just a natural instinct in women.........................	3	1	2

The next statement is.......... Do you feel the same way or not?	Feels the same way	Does not feel this	D.K. No personal knowledge Can't say
f) Children get on your nerves............	3	1	2
g) Women only have babies because they feel they ought to have babies.........	3	1	2
h) Children are selfish; it's all give and no take having children............	3	1	2
i) Cuddling babies makes all the trouble they are worthwhile............	3	1	2
j) Women don't want to accept the responsibility of looking after several children of their own..........	3	1	2
k) You always find the happiest families are those with a large number of children.....................	3	1	2
l) People will have to stop having large families because we are overpopulated.........................	3	1	2
m) As you get older, it's nice to have young children of your own about the house............................	3	1	2
n) When the children grow up, there will be so many people it will be difficult to get jobs...............	3	1	2
o) People can't afford to have as many children as they would like........	3	1	2
p) Women find motherhood satisfying...........................	3	1	2
q) These days, schools are overcrowded because too many children are being born............................	3	1	2

Now can we talk about you (and your family)

10. At what ages do children give you most pleasure.
If you had to choose would you say it was when
they are..............

	Under two years...........	1
RUNNING PROMPT CODE ONE	Between two and four......	2
	Between five and ten......	3
	or When they are over ten?	4
IF SPONTANEOUS	Other answers (specify)	X

11. How would you rate your family income at the moment?
Would you say it was.........

RUNNING PROMPT CODE ONE	Enough for your needs....	1
	More than enough.........	2
	Less than you really need	3
IF SPONTANEOUS	Other answers (specify)	X

12. How many children have you had altogether? I'd like to know the number you have had born alive.

None..	0
Number	___

13. Have you had any pregnancies that did not end in a live birth?

Yes	1	Ask (a)
No	2	

If yes (1)

a) How many pregnancies have you had altogether that did not end in a live birth?

Number	___

14. Can I check? Are you pregnant/expecting now?

Yes......	5	Ask (a)
No.......	6	
Uncertain	7	Ask (a)

If yes (5) or uncertain (7)

a) When is (would) the baby (be) due?

Month	___
Year	19___

IF NEVER PREGNANT (Codes 0,2,6)	Go to Q.19 p.13
IF PRESENT PREGNANCY IS FIRST (Codes 0,2,5 or 7)	Go to N.B. instruction Page 9
IF ALL PREVIOUS PREGNANCIES RESULTED IN LIVE BIRTH (A number in Q.12 and code 2)	Ask Q.15 (a)-d)
IF ALL RESULTED IN NON-LIVE (codes 0,1)	Ask Q.15 (e)-g)
ALL THE OTHERS	Go to Q.15

TO THOSE WHO HAVE BEEN PREGNANT

I'd like to check the details of your pregnancies starting with the first.

15. Did your first (second, third, etc) pregnancy end in a live birth?

CODE OR ASK AS NECESSARY FOR EACH PREGNANCY IN TURN	IF YES (live birth) ask a-d IF NO (non-live birth) ask e-g

LIVE BIRTHS

a) Was your first child a girl or a boy?
b) What did you call him/her?
c) In what month and year was he/she born?

IF TWINS ETC., TAKE UP ONE COLUMN FOR EACH OUTCOME AND RE-NUMBER SUBSEQUENT PREGNANCIES

PRECODE OR ASK AS NECESSARY

d) Can I check. Is he/she still living?
IF NO i) In what month and year did he/she die?

NON-LIVE BIRTHS

e) In what month and year did the pregnancy end?
f) How many months were you pregnant then?
g) Did this pregnancy end in a still-birth, a legal abortion, a miscarriage, or was it ended in some other way?

	RING PREGNANCY OCCURING IMMEDIATELY BEFORE LAST INTERVIEW		1st preg.	2nd preg.	3rd preg.	4th preg.	5th preg.	6th preg.	7th preg.	
LIVE BIRTHS	15 . Live birth?	Yes	1	1	1	1	1	1	1	ask a-d
		No	2	2	2	2	2	2	2	ask e-g
	a) Sex	boy	3	3	3	3	3	3	3	
		girl	4	4	4	4	4	4	4	
	b) Childs name									
	c) Date of birth	Month	___	___	___	___	___	___	___	
		Year	19__	19__	19__	19__	19__	19__	19__	
	d) Still living?	Yes	x	x	x	x	x	x	x	
		If no								
	i) Date of death:	Month	___	___	___	___	___	___	___	
		Year	19__	19__	19__	19__	19__	19__	19__	
NON LIVE	e) Date of end	Month	___	___	___	___	___	___	___	
		Year	19__	19__	19__	19__	19__	19__	19__	
	f) No. months of pregnant									
	g) Cause:	still birth	1	1	1	1	1	1	1	
		a legal abortion	2	2	2	2	2	2	2	
		miscarriage	3	3	3	3	3	3	3	
		some other way	4	4	4	4	4	4	4	

NO LIVING CHILDREN AT ALL	K	GO TO Q.19 p.13	
NO LIVING CHILDREN SINCE PREVIOUS INTERVIEW	L	GO TO Q.17 p.12	
LIVING CHILDREN BEFORE AND SINCE PREVIOUS INTERVIEW	M	GO TO INSTRUCTION I(i) p.10	ASK Q.16 OF ALL LIVING CHILDREN BORN SINCE PREVIOUS INTERVIEW
LIVING CHILDREN SINCE LAST INTERVIEW ONLY		GO TO INSTRUCTION I(ii) p.10	

N.B. IF INFORMANT IS EXPECTING A CHILD ALSO ASK Q.16 ABOUT EXPECTED PREGNANCY AND INTERVAL, HEADING COLUMN "EXPECTED CHILD".

ENTER I) EITHER i) NAME AND DATE OF BIRTH OF LIVING CHILD BORN PRIOR TO PREVIOUS INTERVIEW

OR ii) DATE OF MARRIAGE (IF LIVING CHILDREN SINCE PREVIOUS INTERVIEW ONLY)

II) NAMES OF LIVING CHILDREN BORN SINCE PREVIOUS INTERVIEW, STARTING WITH FIRST

III) DATES OF BIRTH

IV) LENGTHS OF INTERVAL BETWEEN BIRTHS OF CHILDREN AND BETWEEN MARRIAGE AND CHILD (WHERE APPLICABLE)

(N.B. DO NOT ASK Q.16 FOR INTERVAL OF LESS THAN 9 MONTHS BETWEEN MARRIAGE AND FIRST CHILD)

---

16. a. Could you tell me under which of these circumstances your pregnancy with (NAME OF CHILD) occurred?

HAND INFORMANT CARD A

PROMPT INDIVIDUALLY AND CODE ONE

After you and your husband deliberately stopped using a method of family planning in order to have a child..............................
While your husband was taking care or you were using some method of family planning which didn't work or you took a chance................
Before you and your husband ever started doing anything about family planning...
Some other circumstances (specify)......................................

---

b. Did this mean that... you wanted or didn't mind a child at that time.....
or you wanted a child but not at that time.........
or you didn't want a child at all.................

---

c. (NAME OF CHILD) was born ____ months after (NAME OF PREVIOUS CHILD/MARRIAGE). Was this the kind of interval you wanted between them at this time, or would you have preferred it to be shorter or longer?

Interval wanted..............
Preferred shorter/longer.....

If interval wanted (6)

(i) What kind of things made you decide to have (NAME OF CHILD) at that time rather than before or later?

If wanted a child but not at that time (2)

or If preferred shorter or longer (7)

(ii) How long (months) after the birth of (NAME OF PREVIOUS CHILD/MARRIAGE) would you have liked to have (NAME OF CHILD)? ________

(iii) Why did you thank that would have been a better time to have had (NAME OF CHILD)?

NAME ______________ DATE ________ month __________ 19__ A.

Date ______ month ______ 19__ A.

1st child born since previous interview Name ______________ Date of birth __________B	2nd child born since previous interview Name ______________ Date of birth __________C	3rd child born since previous interview Name ______________ Date of birth __________D
Interval.........months B-A	Interval.........months C-B	Interval.........months D-C
..........1 Ask c) ....2 ....3 — Ask b) 4	1 Ask c) 2 3 — Ask b) 4	1 Ask c) 2 3 — Ask b) 4
..........1 Ask c) ....2 Ask c(ii) & (iii) ....3 ASK ABOUT NEXT INTERVAL THEN GO TO Q.17	1 Ask c) 2 Ask c(ii) & (iii) 3 ASK ABOUT NEXT INTERVAL THEN GO TO Q.17	1 Ask c) 2 Ask c(ii) & (iii) 3 ASK ABOUT NEXT INTERVAL THEN GO TO Q.17
..........6 Ask (i) ....7 Ask (ii) (iii)	6 Ask (i) 7 Ask (ii) (iii)	6 Ask (i) 7 Ask (ii) (iii)
.... months ASK ABOUT NEXT INTERVAL IF NONE GO TO Q.17	.... months ASK ABOUT NEXT INTERVAL IF NONE GO TO Q.17	.... months ASK ABOUT NEXT INTERVAL IF NONE GO TO Q.17

TO ALL WITH ONE OR MORE LIVING CHILDREN	
17. How many children do you think your husband wants now (counting those you already have)?	
Number	___
D.K.	99
IF INFORMANT HAS ONE LIVING CHILD ONLY: GO TO Q.19	
IF MORE THAN ONE LIVING CHILD : SEE Q.18.CODE D.N.A.IF LAST/ EXPECTED PREGNANCY WAS DELIBERATELY PLANNED.	
DNA Last/expected pregnancy deliberately planned	1 Go to Q.19
TO THOSE WITH MORE THAN ONE LIVING CHILD:	
18. When you had (NAME OF LAST CHILD) did you feel you had more children than you really wanted?	
Yes.....................	2
No......................	3
Other answers (specify)	X

TO ALL

19. As far as you know, could you or your husband have any (more) children if you wanted to (when this pregnancy ends) or would there be some medical reason for your finding it difficult or impossible?

Could have more children if wanted....................	1	Ask Q.20
Medical reasons for finding it difficult or impossible	2	GO TO Q.21
Other answers (specify).............................	3)	Ask a) or code a) as appropriate
D.K..	4)	

If other answers/D.K. (3 or 4)

a) Have you any reason for thinking that it might be difficult for you and your husband to have any more children?

Has reason...	5	GO TO Q.21
Has no reason	6	Ask Q.20

If could have more children (1) or no reason (6)

20. Within the last five years have there been any times when you and your husband thought you might not be able to have a child for medical reasons?

Yes	1	Ask a)& b)
No	2)	GO TO Q.26B p.15
D.K.	3)	

If yes (1)

a) Were you worried about....

PROMPT AND CODE EACH

	Yes	No
previous miscarriages..........	1	1
not getting pregnant...........	2	2
having a child born alive......	3	3
a general danger to your health	4	4
or some other thing (SPECIFY)..	X	X

b) Did you or your husband see a doctor about it?

Yes	5	Ask (i)
No	6	to 26b

If Yes (5)

(i) Does the doctor now say that your chances of being able to have a (another) child are....

PROMPT AND CODE ONE

good....	1)	GO TO Q.26B p.16.
fair....	2)	
or poor?	3)	
IF SPONTANEOUS Other answers (specify)	X	to 26b

TO THOSE WHO THINK THERE ARE MEDICAL REASONS FOR FINDING IT DIFFICULT OR IMPOSSIBLE TO HAVE ANY MORE CHILDREN (Q.19 code 2 or Q.19a code 5)

21. Have you or your husband had an operation or an injury which makes it impossible to have (more) children?

	No....................	1)	GO TO Q.22
	D.K....................	2)	
If yes:-	operation to informant	3)	Ask a)b)& c)
	operation to husband..	4)	
PROMPT AS NECESSARY	injury to informant...	5)	Ask a)
	injury to husband.....	6)	

If yes (3.4.5.6)

a) In what month and year was it carried out/did it happen?

______month

19____

IF INJURY GO TO Q.32 p.19

If yes, operation (3.4)

b) What kind of operation was it?

c) Was the operation carried out mainly to prevent you becoming pregnant (again), or not.

Yes	1	Ask (i)
No	2	GO TO Q.32 p.19

If yes (1)

(i) What made you (or your husband) decide to have an operation to prevent pregnancy at that time?

GO TO Q.32 P.19

22. Why do you think it would be difficult for you and your husband to have any more children?

23. Are you worried about....

PROMPT AND
CODE EACH

	Yes	No
Previous miscarriages.........	1	1
Not getting pregnant..........	2	2
Having a child born alive......	3	3
A general danger to your health	4	4
Or some other thing? (SPECIFY).	5	5

24. When did you/your husband first begin to think that it would be difficult to have more children?

IF DATE NOT GIVEN, CHECK: That would be .... months after (NAME OF CHILD's)birth/marriage?
↓
WRITE IN NAME ______________________

25. Have you (your husband) seen a doctor about it?

Yes	1	Ask a) & b)
No	2	Ask Q.26A

If yes (1)

a) When did you/your husband first see a doctor about it?

IF DATE NOT GIVEN CHECK: That would be .... months after (NAME OF CHILD(S)birth/marriage?
↓
WRITE IN NAME______________________

b) Does the doctor now think that your chances of being able to have any (more) children are good, fair or poor?

CODE
ONE

	Good	1
	Fair	2
	Poor	3
IF SPONTANEOUS.	Other answers (specify)	X

Ask Q.26A

TO ALL (EXCEPT THOSE WHO HAVE HAD AN OPERATION/INJURY MAKING IT IMPOSSIBLE TO HAVE CHILDREN): ASK 26A IF SAYS "DIFFICULTY" IN HAVING CHILDREN
26B IF NO DIFFICULTY

26A. Although you may have difficulty, do you hope to have any (more) children (after this baby)? Would you say.....

26B. Do you expect to have any (more) children (after this baby)? Would you say.......

RUNNING PROMPT
CODE ONE

Definitely Yes	1	Ask Q.27
Probably Yes..	2	
Uncertain.....	3	
Probably no...	4	GO TO Q.31
or Definitely no.	5	

27. How many children do you expect/hope to have altogether (counting those you have now)?
EXCLUDE FOSTER/ADOPTED CHILDREN
AND CHILDREN THAT HAVE DIED

Number	___	Ask a)
D.K...	99	Ask (i)(ii)&(i.

If number given at Q.27

a) How sure are you that you will have ____ children in all - very sure, fairly sure or not too sure?

Very sure...	1	SEE BELOW
Fairly sure.	2	Ask i) ii) & iii)
Not too sure	3	

If D.K. (99) or fairly sure/not too sure at a) (2,3)

i) Would the number depend on whether you have children of the sex you want?

Yes	1
No	2

ii) What do you think is the largest number of children you might have in all (counting those you already have) - your best guess?

Number	____	
D.K...	99	GO TO Q.30 p.18

iii) What do you think is the smallest number of children you might have in all (counting those you already have) - your best guess?

Number	____
D.K...	99

INT: SUBTRACT NUMBER OF LIVING CHILDREN HAS NOW FROM
i) NUMBER IN Q.27 a ii) IF GIVEN
OR ii) NUMBER IN Q.27 a.

CHECK: So that, at most, you might have ____ more children than at present.

IF INFORMANT 'UNCERTAIN' ABOUT HAVING FUTURE CHILDREN (Code 3 Q.26)............ GO TO Q.30 p18
OTHERWISE............ Ask Q.28

TO THOSE WHO DEFINITELY/PROBABLY EXPECT ONE OR MORE CHILDREN IN FUTURE (Q.26 codes 1,2)

28. Taking all things into consideration, how many months after

ASK ONE ONLY	PRIORITY	the birth of your expected child........ the birth of (NAME OF LAST LIVING CHILD) your marriage..........................

would you expect to have your next (first) child?

	_______ months
D.K.	99 GO TO Q.30

29. Is _____ months the gap you think right to have between these two children (between marriage and your first child) or would you prefer it to be longer or shorter?

Think right...........	1 Ask a)
Prefer longer/shorter	2 Ask b) & c)

If thinks right (1)

a) Why do you think this length is right?

If longer or shorter (2)

b) How long a gap (in months) would you have preferred (between these two pregnancies/between marriage and your first child) ?

______ months

c) Why do you think that would be a better length between the two children (between marriage and your first child) ?

30. How old do you think you will be when you have your last child?

	____ years
D.K.	99

GO TO Q.32

TO THOSE WHO PROBABLY/DEFINITELY EXPECT NO (MORE) CHILDREN
(Q. 26 codes 4 & 5)

31. What, if anything would make you change your minds and have more children?

Nothing................	0 GO TO Q.32
Other answers (specify)	1 Ask a)

a) If you were to have any more children what would be the largest number you would expect to have altogether (counting these you have now)?

Number	_____ GO TO Q.32
D.K...	99

TO ALL

INTRO. I would like to talk now about planning families because sometimes this relates to the gaps people expect to have between children.

HAND INFORMANT CARD B

32. Have you or your husband ever used any of these methods or any other method to limit the number of children or to keep from having them at certain times? Would you tell me yes or no for each one that I call out?

	Yes	No
Safe period/rhythm method	1	1
Husband withdraws/takes care	2	2
Douching/washing within 1 hour of intercourse	3	3
Complete abstinence/going without sexual intercourse for a period of six months or longer	4	4
Sheath/condom/Durex/French letter	5	5
Loop/coil/intra-uterine device/IUD	6	6
Cap with jelly or cream	7	7
Cap used by itself	8	8
Jellies/creams/suppositories/pessaries/foam/Emko	9	9
Pill/contraceptive pill/birth control pill	10	10
Any other methods (RECORD DETAILS)	11	11

None, nothing at all ....99 GO TO Q.39 IF OPERATION/INJURY; Q.36 OTHERWISE

Ask Q.33 IF NOT PREGNANT AND NO OPERATION/INJURY; Q.34 IF PREGNANT OR OPERATION/INJURY

IF NOT PREGNANT NOW AND NO OPERATION/INJURY	IF PREGNANT NOW OR INFORMANT/ HUSBAND HAS HAD OPERATION INJURY
Q.33 Which of these methods, if any, do you or your husband use at present? RECORD IN COL.(i) →	Q.34 Which of these methods did you last use? RECORD IN COL. (ii) →

a) What are the main reasons why you and your husband are not taking precautions to prevent pregnancy at the moment?

Wants baby/Don't mind if have baby	1	Ask Q.34
Just had baby....................	2	
Other answers (specify)..........	3	

IF INFORMANT SAYS SHE AND HER HUSBAND ARE NOT HAVING MARITAL RELATIONS OR ARE USING WITHDRAWAL, INCLUDE THESE AS "METHODS" OF FAMILY PLANNING. CODE IN APPROPRIATE COLUMN AND CONTINUE AS FOR OTHER METHODS.

b) When did you start using this (these) method(s) this time? RECORD IN APPROPRIATE COL. IF MORE THAN ONE METHOD IN COL., RECORD EARLIEST DATE ONLY. IF DATE IS AFTER DATE OF PREVIOUS INTERVIEW, ASK (c), IF BEFORE, CODE 99 IN NEXT COL. AND GO TO (d). →

c) What methods did you use before that? RECORD IN COLS.(iii)-(v) REPEAT (b) AND (c) UNTIL DATE OF PREVIOUS INTERVIEW REACHED. THEN ASK (d) (IF APPROPRIATE) FOR ALL COLS.

d) IF MORE THAN ONE METHOD IN ANY COL.(i)-(v). Do/did you use any of these methods at the same time or do (did) you use them separately? Which methods are/were used together? RECORD IN APPROPRIATE COL. →

e) FOR EACH COL. Since you have been / While you were using (NAME METHODS/NUMBERS) did you always use a method or did you sometimes take chances? RECORD IN APPROPRIATE COL. → CODE 1 IF IUD USED.

f) FOR EACH COL. EXCEPT "USES NOW". When did you stop using this (these) methods? RECORD IN APPROPRIATE COL. → IF MORE THAN ONE METHOD IN COL. RECORD LAST DATE ONLY.

		Methods used since last interview			
	Method(s) uses now (i)	Method(s) used last If pregnant now/or operation/ injury/ wants/ just had baby. (ii)	Method(s) used before (iii)	Method(s) used before (iv)	Method(s) used before (v)
None, nothing,	99 - Ask (a)		99	99	99
1. Safe period/rhythm method	.1	.1	.1	.1	.1
2. Husband withdraws/takes care	.2	.2	.2	.2	.2
3. Douching/Washing within 1 hr	.3	.3	.3	.3	.3
4. Complete abstinence/going without sexual intercourse for six months or longer	Ask (b) .4	Ask (b) .4	Ask (b) .4	Ask (b) .4	Ask (b) .4
5. Sheath/condom/Durex/French letter	.5	.5	.5	.5	.5
6. Loop/coil/intra-uterine device IUD	.6	.6	.6	.6	.6
7. Cap with jelly or cream	.7	.7	.7	.7	.7
8. Cap used by itself	.8	.8	.8	.8	.8
9. Jellies/creams/suppositories/ pessaries/foam/Emko	.9	.9	.9	.9	.9
10. Pill/contraceptive pill/birth control pill	10	10	10	10	10
11. Other methods (GIVE DETAILS)	11	11	11	11	11
b) Date started using (first) method in column.	month___ 19___	month___ 19___	month___ 19___	month___ 19___	month___ 19___
d) None used together RING	99	99	99	99	99
Give nos. used together	__ __	__ __	__ __	__ __	__ __
Give nos. used together	__ __	__ __	__ __	__ __	__ __
e) Always used Take chances Other answers (specify)	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
f) Date stopped using (latest) method in column		month___ 19___	month___ 19___	month___ 19___	month___ 19___

g) IF SAFE PERIOD/RHYTHM METHOD USED IN ANY OF COLS. (i)-(v)

(i) You mentioned the safe period/rhythm method. Which days do you feel are the safe ones?

(ii) Do/did you use anything to work out which were the safe days?

	Yes	1	Ask (iii)
	No	2	

If yes (1)

(iii) What do/did you use to work out the safe days?

35. Since the last interview - that is since - (GIVE DATE OF PREVIOUS INTERVIEW) - have there been any periods of two years or longer during your marriage when you and your husband did not use any method of family planning at all.

(N.B. NOT HAVING SEXUAL INTERCOURSE/WITHDRAWAL ARE INCLUDED AS METHODS OF FAMILY PLANNING)

Yes	1	IF HAS BEEN/IS PREGNANT: ASK a) OTHERWISE } GO TO
No	2	.... }

a) Did you become pregnant at any of these times?

Yes	1
No	2

IF INFORMANT/HUSBAND HAS HAD OPERATION/INJURY: GO TO Q.39

REMAINDER: ASK Q.36

TO ALL EXCEPT THOSE WHO/WHOSE HUSBANDS HAVE HAD OPERATION/INJURY

HAND INFORMANT CARD B

36. Do you think you will use) one or more of these
go on using) methods of
family planning in)
for) the next five years?

Yes	1	Ask a)
No	2	GO TO Q.37

If yes (1)

a) Which of these methods do you think you will use/go on using?

Please call out the numbers of all the methods you think you will use.

[CODE ALSO IN COL.B. METHODS WILL USE BUT NOT USED NOW]

	(A) Will Use		(B) Not Used Now	
Safe period/rhythm method	1 →	Ask a) & b) ←	1	Ask (c) - (e)
Husband withdraws/takes care	2		2	
Douching/washing within 1 hour of intercourse	3		3	
Complete abstinence/going without sexual intercourse for a period of six months or longer	4		4	
Sheath/condom/Durex/French letter	5		5	
Loop/coil/intra-uterine device/IUD	6		6	
Cap with jelly or cream	7		7	
Cap used by itself	8		8	
Jellies/creams/suppositories/pessaries/foam/Emko	9		9	
Pill/contraceptive pill/birth control pill	10		10	

CODE ONLY IF MENTIONED SPONTANEOUSLY

Sterilisation	12	GO TO Q.37b)&c)
None of these	99	GO TO Q.37

If safe period (1) in col.A. and not used in past

a) Which days do you feel are the safe ones?

b) Would you use anything to work out which are the safe days?

Yes	1	Ask (i)
No	2	
D.K.	3	

If yes (1)

(i) What would you use to work out the safe days?

IF CODES 1 - 10 IN COL. A ONLY RINGED: GO TO Q.38 p.25

If more than one code in col. B

c) Which of these methods will you use first?

No.(s)		Ask d)
D.K.	99	GO TO Q.38

If any 1-10 in Col.B

d) When do you think you will first/again start to use that method?
(METHOD IN c) OR SINGLE METHOD IN COL.B)

RUNNING PROMPT CODE ONE

Within the next year.............	1
1 year but less than 2 years time.	2
2 years but less than 5 years time	3
5 or more years time..............	4
Other answers (specify)..........	5

e) Will you start using this method after you have had all the children you think you will have or before that?

After all children....	1	
Before that...........	2	Ask (i)
Other answers(specify)	3	

If before that (2)

(i) How many children do you think you will have before you start using this method?

Number		GO TO Q.38
D.K.	99	GO TO Q.38

If none of these (99) in Q.36a)

37. What do you think you will do to avoid having pregnancies too frequently?

CODE DO NOT PROMPT

Nothing, wants children (frequently)	1	GO TO Q.38
No need to do anything.............	2	Ask a)
Sterilisation......................	3	Ask b) & c)
Other answers (specify)............	4	GO TO Q.38

If no need to do anything (2)

a) What are your reasons for thinking that?

If sterilisation (3)

b) Do you think *you* will have this done, or will your husband?

Informant.............	1
Husband...............	2
Other answers (specify)	3

c) When do you think you/your husband will have this done?

PROMPT

Within the next year.........	1
1 year but less than 2 years.	2
2 years but less than 5 years	3
5 or more years time.........	4

38. Who do you think ought to take precautions to avoid pregnancy - the husband, the wife or both?

PROBE "In general" IF NECESSARY

CODE ONE

Husband	1
Wife...	2
Both...	3
Other answers (specify)	4

TO ALL

Can I ask you what you think about the contraceptive pill.....

39. What, if anything, are some of the good things about the pill?

(PROMPT "What do you think?" IF INFORMANT HAS NOT USED IT)

40. And what are some of the things about the pill that(you think) you dislike?

(PROMPT "What do you think?" IF INFORMANT SAYS D.K./HAS NOT USED IT)

TO ALL

I would like to ask you about some other things women have said about having children.

41. Would you tell me whether, on the whole, you think it is very important, important or not important for a child to have the thing I am about to mention.

First (READ a)....... do you think this is very important, important or not important?

REPEAT Q. for b) to i) in turn	Very Important	Important	Not Important	Other answers. Specify in margin
a) education after the age of 16 if the child is a girl, regardless of her ability	3	2	1	0
b) a separate bedroom for each child when they are teenagers	3	2	1	0
c) a nice home for inviting friends round	3	2	1	0
d) several brothers and sisters	3	2	1	0
e) toys like those of children he plays with	3	2	1	0
f) new clothes especially for him rather than ones handed down	3	2	1	0
g) at least one brother or sister	3	2	1	0
h) training in sharing things with others	3	2	1	0
i) a lot of individual attention from parents	3	2	1	0

42. Many people talk about the "population problem". What kind of things does this mean to you?

D.K........ X GO TO Q.44

43. Which of the things you have mentioned do you think are important for people like yourselves?

TO ALL

I'd like to ask you about work now (because this may be related to the gaps women have between children).

44. Apart from being a housewife, are you doing any paid work now?

> 1) INCLUDE AS WORKING, ANY IN PAID EMPLOYMENT FROM ONE HOUR PER WEEK UPWARDS. EXCLUDE ACTING AS AN AGENT (e.g. MAIL ORDER) INTERMITTENTLY.
>
> 2) IF SICK OR UNEMPLOYED BUT SEEKING WORK, COUNT AS WORKING. IF USUALLY WORKS BUT IS NOT WORKING AT MOMENT COUNT AS WORKING IF INTENDS TO CONTINUE.

Yes 1
No 2 Ask a)

If no (2)

a) Have you worked at all since (DATE OF PREVIOUS INTERVIEW) ?

Yes 3 GO TO Q.45
No. 4 GO TO Q.50

45.a) What is/was your present/last job?
PRESENT/LAST OCCUPATION

PRESENT/LAST INDUSTRY

If self-employed/managerial above foreman level
Number in establishment

Nil... 0
1 - 24 1
25+... 2
} IF NOT WORKING NOW GO TO Q.47

b) No. of hours worked per week ________

IF INTERMITTENT WORK, WORK OUT APPROX. AVERAGE HOURS PER WEEK.
FULL TIME WORK IS OVER 30 HOURS PER WEEK
PART TIME WORK IS 1-30 HOURS PER WEEK
} Check this with informant

46. Have you worked continuously since (DATE OF PREVIOUS INTERVIEW) or have you had any breaks of seven months or longer?

Continuously.................... 1 Ask a)
Had breaks of 7 months or longer 2

If continuously (1)

a) Since (date of previous interview) have you always worked full-time/part-time/intermittently (REFER TO Q.45b)?

Yes 4 GO TO Q.49
No 5 GO TO Q.47

I'd like to ask you about the jobs you've had since we last spoke to you. We are particularly interested in any changes between periods you worked full-time or part-time or not at all.

47. At the time of the last interview, that is (GIVE DATE) were you working more than 30 hours a week, 30 or fewer hours or weren't you working at all?

CODE ONE	More than 30 hours per week	1	GO TO Q.48
	30 or fewer hours per week.	2	GO TO Q.48
	Not working at all.........	3	Ask a) & b)

If not at all

a) When did you first start working again? ______ month 19____

b) In that job, did you first work full-time – that is more than 30 hours a week – or part-time?

full-time? 1
part-time? 2

48. a) When did you stop (working full-time/part-time)(this)?
b) What were your reasons for stopping?
c) What did you do next? Did you work full-time, part-time, or not at all?
d) When did you start this?

REPEAT a)-d) TO ACCOUNT FOR PERIOD UP TO PRESENT THEN → RECORD BELOW

(a) When stopped	(b) Reason for stopping	(c) Change to F/T	P/T	Not Working	(d) When started
______ month 19___ Present X		1	2	3	______ month 19___
______ month 19___ Present X		1	2	3	______ month 19___
______ month 19___ Present X		1	2	3	______ month 19___
______ month 19___ Present X		1	2	3	______ month 19___

IF NOT WORKING AT PRESENT: GO TO Q.50
IF WORKING AT PRESENT: ASK Q.49

TO THOSE WORKING AT PRESENT

49. Do you intend to stop working for a period of seven months or longer in the next five years?

Yes	1	Ask a)&b)
No	2	GO TO Q.51

If yes (1)

a) In what year do you think you will stop for the first time?

	19___	
D.K.	99	

b) What will be your reasons for stopping work in (YEAR IN Q.49 a))?

Ask Q.50

TO THOSE NOT WORKING NOW and TO THOSE WORKING NOW BUT INTENDING TO STOP:

(Ask about work after future breaks).

50. Do you think you will go (back) to work in the future (after you have had the breaks you want) even if your husband is well and working? Would you say....

PROMPT
AND
CODE ONE

Definitely yes	1	Ask a)-c)
Probably yes..	2	
Uncertain.....	3	
Probably no...	4	GO TO Q.51
Definitely no.	5	

If yes, uncertain (1,2,3)

a) In what year do you think you will go (back) to work continuously, that is, after all the breaks?

	19___	
D.K.	99	

b) What kind of job will you go (back) to?

c) Will that be full-time or part-time, do you think?

Full-time..............	1
Part-time..............	2
D.K....................	3
Other answers (specify)	4

TO ALL

51. What is your husband's present occupation?

IF HUSBAND NOT WORKING AT PRESENT, CODE BELOW AND GIVE DETAILS OF LAST EMPLOYMENT

Husband sick at present............	1
Husband unemployed at present.......	2
Other reason for husband not working at present (specify).............	3

PRESENT/LAST OCCUPATION

PRESENT/LAST INDUSTRY

If self-employed managerial/above foreman level

Number in establishment	Nil	0
	1-24	1
	25+	2

TO ALL

52. Here is a card showing amounts of income (CARD C) Could you tell me in which of these groups your husband's net income from all sources falls. Exclude compulsory deductions but include any income from bonuses, overtime, etc. (CODE BELOW)

53. Now if we take your net income, if any, together with your husband's, into which group does that total fall. (INCLUDE INVESTMENT INCOME)

	Per week	Per month	Husband only	Husband and wife
1	Up to £10.................	Up to £43........................	1	1
2	£10 to £14.99	£43 to £64.99	2	2
3	£15 to £19.99.............	£65 to £86.99....................	3	3
4	£20 to £24.99	£87 to £107.99	4	4
5	£25 to £29.99.............	£108 to £129.99..................	5	5
6	£30 to £34.99	£130 to £151.99	6	6
7	£35 to £39.99.............	£152 to £172.99..................	7	7
8	£40 to £49.99	£173 to £217.99	8	8
9	£50 or more...............	£218 or more.....................	9	9
X	Not known	Not known	x	x
Y	Refusal (specify)..........	Refusal (specify)................	y	y

Appendix B

The Sample

1. The sampling operation in 1967

The population to be investigated in 1967 was defined as all married women in England and Wales below the age of 45 years who had been married only once. A target sample of 7,500 respondents was set in order to produce population estimates of the required precision and a probability sample was selected using the Electoral Register as a sampling frame of addresses. Altogether 20,800 addresses were selected with equal probability from all addresses on the 1967 Electoral Register for England and Wales. Further details may be obtained from Appendix A of 'Family Intentions'.[1]

In the event, the result of selecting a sample of the defined population in this way was an apparent short-fall of eligible women. Married women aged below 20 years and between 40 and 44 years seemed to be disproportionately omitted from the responding sample. There was some evidence to suggest that those who had been lost to the responding sample were more frequently from those who had married young and who had had no or relatively few children. However, the effects of these omissions on the estimates of 'most likely expected family size' and ' contraceptive use' for the population as a whole were minimal. Their effects on certain sub-groups of the population were more difficult to gauge although, again, the habits and circumstances of a considerable proportion of the omitted women would have had to be very different from the women who replied to have radically affected the conclusions. Nevertheless, it needs to be remembered that the 1967 sample of respondents itself omitted about a third of the *married* women who were under 20 years of age in 1967.

At the end of the 1967 interview, the women who participated were asked if they would be willing to be re-interviewed sometime in the future on the same subject—about 5 per cent were not willing—and they were left with a pre-paid post-card which they could send to the Sampling Branch of the Social Survey Division of the OPCS in the event of their moving house in the future. Since, at that stage, there was some doubt about the possibility of implementing a follow-up study, no further arrangements were made to maintain contact with the original respondents.

2. The 1972 sample

Resources were made available by the OPCS for a continuation of the study in 1971. To allow for a more precise analysis of change, the sample interviewed in 1967 was to be interviewed again in 1972 rather than an independent sample selected. However, resources were limited and only a sub-sample of those interviewed in 1967 could be re-interviewed. Since the main objective of the 1972 study was to assess the reliability of women's statements about the number of children they expected to have and since greater variability in these expectations was more likely among younger women and those more recently married, the recall was confined to these women. No attempt was made to interview women who had married since the 1967 fieldwork period.

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[1] Woolf op. cit.

More precisely, two groups were selected for recall:

Sample A: married women[1] under 30 years of age at the time of the 1967 investigation;

Sample B: women married[1] between 1960 and 1967.

This was to allow for the possibility of comprehensive analysis by both birth and marriage cohorts. From both groups, women who in 1967 said that it was impossible for them to have any more children were omitted. They constituted about 1 per cent of the women in the two sub-samples.

There appeared, in 1967, to be 2,327 married women *respondents* eligible for sample A and 2,241 for sample B: approximately 2,000 had the characteristics required for both sub-samples and altogether 2,541 women seemed to be eligible for a further interview. Of these women, only those who had originally agreed to be re-interviewed could be approached, and among the remainder only those whose marriages had remained intact were to be interviewed. Those women who were separated or divorced from the husband they had had in 1967 were not considered as members of the population for this study.

3. The method of selecting the 1972 samples

In 1967, apart from recording the names and addresses of respondents on the questionnaires and obtaining their consent to a future interview, prepaid cards notifying us of a change of address were left with respondents to be despatched to the Sampling Branch of the OPCS if the need arose. Between 1967 and 1972, some change-of-address cards were returned but inevitably some households moved unbeknown to us.

Two approaches to the tracing of households who had moved were undertaken. First, the names and addresses of respondents were checked against the 1971 Electoral Register. Households who did not appear to be at their latest known address were identified on the interviewers' record sheets and interviewers were instructed to make extensive enquiries in the neighbourhood to see if information could be gained about the current whereabouts of the 1967 respondents. Similar enquiries were to be made about households who according to the 1971 Electoral Register were at their last known address but who had moved since the sample had been selected. For both these groups, the households successfully traced in the field were either interviewed if their current addresses were accessible or, if not, their new addresses were re-allocated to constitute a second fieldwork phase.

If the current addresses of respondents could not be followed up in the field, a second approach to tracing the households was to be made through the National Health Service Central Register (NHSCR). However, this second method of tracing households who had moved was confined to women with children in 1967. Childless women are omitted from the Register.

Since the records of the NHSCR are confidential, are dispersed among the Local Executive Councils and exist for the purposes of recording changes in registrations with general practitioners, the tracing of households for the purposes of this study had to be done indirectly. Details of the 1967 respondents whose whereabouts were not known in 1972 were sent to the NHSCR who agreed with the aid of their Local Executive Councils to send a letter to the women whose addresses they could trace requesting further help and asking the women to write to the Sampling Branch of the OPCS with their new address. A copy of the letter is reproduced at the end of this Appendix. At no stage was any information obtained directly from the Register itself.

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[1] Married once only.

Households who were found not to have moved were, of course, approached directly for an interview at their last known address.

4. The results of the sampling operations

The result of the first fieldwork phase between February and April 1972 was:

Table B1

	Number of married women	
Sample set	2,541	
Wrongly sampled	125[1]	
Ineligible (separated, divorced)	125	
Women eligible for re-interview	2,291	
Interviewed	1,554	
Refusals	118	
Non-contacts	619	
Emigrated		43
Moved: no information		55
Moved: new address established		61
Moved: to be traced via NHSCR		457
Out at all calls		1
In hospital throughout fieldwork		1
No field resource for contacting		1

[1] Includes 121 women who were in fact aged 30 in 1967. They were included to reduce the omissions due to the possible misrecording of ages in 1967.

The result of attempting to trace addresses by means of the NHSCR was:

Table B2

	Number of married women
Not traced during fieldwork	457
Childless in 1967	132
Addresses should be traceable	325
Not traced	106
Letters sent by NHSCR	219
Replied	129
Agreed to be re-interviewed	95

Thus, the improvement in the response rate brought about by the use of the NHSCR was small and probably out of proportion to the effort expended. Those women who agreed to be re-interviewed after being traced by the NHSCR, together with those whose current addresses were obtained during the first fieldwork phase, were contacted in June–July 1972. The number of interviews obtained is given below:

Table B3

	Number of married women	
Sample set	156	
Ineligible (separated, divorced, remarried)	7	
Women eligible for re-interview	149	
Interviewed	109	
Refusals	12	
Non-contacts		28
No trace at address given		19
No field resource for contacting		2
Away for fieldwork period		2
Out at all calls		5

The overall result of attempting to re-interview the original sample of 2,541 women thought to be eligible for re-interview was:

Table B4

		Number of married women	*Percentage*		*Percentage*
Sample set		2,541	100		
Wrongly sampled/ineligible		257	10		
Eligible for re-interview		2,284	90		100
Interviewed		1,660			73
Refusals (personal and by reply to NHSCR)		164			7
Non-contacts		457			20
Emigrated	43			2	
Moved and untraceable	312			14	
No reply to NHSCR letter	90			4	
Out/Not available during fieldwork	9			*	
No fieldwork resources	3			*	

Thus 73 per cent of the women eligible for recall (excluding those who refused a recall in 1967) were interviewed. About half of the remaining women had moved house to an address which could not be traced with the resources available.

Of the 1,660 women successfully interviewed, 1,194 were both under 30 years of age in 1967 and married between 1960 and 1967 and therefore eligible for samples A and B; 276 were eligible for sample A only and 190 for sample B. Thus the working samples for A and B consisted of 1,470 and 1,384 women respectively.

5. Deficiencies in the responding sample

The main deficiencies in the responding sample derive from the women who had moved from their last known address and who could be traced neither from information obtained in the field, nor by means of the NHSCR. It was anticipated that the recall sample would omit disproportionately more of the women who had moved house between 1967 and 1972 and at the outset some comparisons were made between a 10 per cent sub-sample of eligible women who, according to the 1971 Electoral Register, were still at their 1967 addresses and a 10 per cent sub-sample of those who were not.

This comparison suggested that women who had moved house were disproportionately more likely to have been childless in 1967 (32 per cent compared with 17 per cent of those who had not moved), to have been married for a shorter period (an average of 4·3 years for movers compared with 5·6 years for non-movers) and to be younger (25 compared with 27 in 1967).

A similar analysis based on the General Household Survey confirmed and, indeed, emphasised these impressions. Data from a sub-sample of women interviewed for the *General Household Survey*[1] in 1971 were further analysed to suggest differences between those who had moved house recently and those who had not. To make the comparison relevant to the fertility recall sample, the analysis was confined to women under 35 years of age in 1972 and who had been married in 1967 or earlier. Women who had lived at their present addresses for less than five years (the 'movers') were compared with women who had been stationary for five or more years on a number of measures relating to their marriage and families. The data are given in table B 5.

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[1] *General Household Survey. Introductory Report*, OPCS Social Survey Division HMSO 1973.

Table B 5 From General Household Survey 1972

Women aged under 35 in 1972 and married 1967 or earlier

Percentage distribution of certain characteristics (analysed by whether at their present address 0–4 or 5 or more years)

	Those at their present address	
	0–4 years	*5 or more years*
Number of women	287	212
	%	%
Date of marriage		
Before 1960	12	26
1960–61	9	21
1962–63	15	24
1964–65	26	18
1966–67	38	11
Number of children liveborn (1972)		
0	10	6
1	21	16
2	43	48
3	20	20
4 or more	6	9
No answer	—	—
Mean number	1·9	2·1
Whether thinks family completed		
Yes	64	75
No	26	17
Don't know	6	6
No answer	3	2
Number of children expected 'now'		
0	4	3
1	7	8
2	43	48
3	27	22
4 or more	10	12
No answer	9	7
Mean number	2·4	2·4
Number of women with at least one liveborn child	259	200
	%	%
Sex of first child		
Male	53	52
Female	47	48
Number of women who thought family completed	183	159
	%	%
Age at which had last child		
Under 20	4	3
20–24	41	25
25–29	42	59
30–34	13	13
Number of women who thought family not yet completed	76	36
	%	%
Age at which expects last child		
20–24	4	—
25–29	41	35
30–34	43	43
35 or over	12	22

Source: Special tabulations from *General Household Survey* OPCS 1972.

There was a direct relation between length of time at their present address and duration of marriage: proportionately more of the women who had lived at their present addresses less than five years had been married for a shorter length of time; more were childless in 1972 or had only one child and fewer considered that their families were complete. On the other hand, those who had moved recently were no more likely than those who had not to expect to remain childless or to have only one child. If anything, more expected three children but this may be a reflection of the characteristic noted earlier in the chapter dealing with expected family size that those with a limited experience of children tended to expect larger numbers of children initially. The sex distribution of first children was the same for both 'movers' and 'non-movers' while the differing ages at which the women had completed or expected to complete their families again illustrated the different points in the marriage continuum at which movers and non-movers tended to find themselves.

Both the previous analyses were concerned with comparisons between all who had apparently moved house within the previous five years and those who had not. In fact, the recall sample contained a proportion of those who were no longer at their 1967 address. Thus the analyses carried out so far, although indicative of the likely bias in the recall sample, would also tend to exaggerate it.

To obtain a more realistic picture of the effects of the disproportionate omission of women who had moved house recently, two further analyses were carried out. The first compared the 1967 characteristics of the recall sample obtained with similar features for the sample as it was originally set. The second compared the recall sample data on the number of living children born with official registration data. These are considered in turn.

Table B 6 *Women married 1960–67*

Percentage comparison of certain characteristics of the women interviewed in 1967 for (i) the recall sample set (including those found to be ineligible) and (ii) the recall sample obtained in 1972

	All dates		*Date of marriage*							
			1960–61		*1962–63*		*1964–65*		*1966–67*	
	Sample		*Sample*		*Sample*		*Sample*		*Sample*	
	Set	*Obtd*	*Set*	*Obtd*	*Set*	*Obtd*	*Set*	*Obtd*	*Set*	*Obtd*
	%	%	%	%	%	%	%	%	%	%
Number of living children in 1967										
0	32	29	12	10	19	14	36	35	73	73
1	33	36	25	28	30	35	48	49	25	26
2	27	27	41	40	41	43	15	15	1	1
3	7	7	18	18	9	8	1	1	—	—
4 or more	1	1	4	4	1	*	—	—	—	—
Most likely number of children expected in 1967										
0	8	6	8	6	8	6	10	8	5	4
1	9	8	10	9	10	8	8	9	6	4
2[1]	48	53	43	46	47	54	52	55	50	56
3	21	22	25	27	20	20	17	17	27	26
4 or more	9	8	10	10	8	7	8	8	9	7
No answer	5	3	4	3	7	5	4	3	3	2
Fecundity assessment in 1967										
Definitely sterile	1	—	2	—	2	—	1	—	*	—
Probably sterile	5	4	7	5	7	6	5	3	3	2
Sub-fecund	8	7	10	10	8	8	6	6	4	2
Fecund with past difficulties	9	8	15	14	10	8	6	6	3	2
Fecund	76	81	65	71	71	78	82	85	90	94
No answer	1	—	1	—	2	—	1	—	*	—
Use of family planning in 1967										
Used reliable methods currently	48	52	52	55	50	52	46	50	44	48
Used less reliable methods currently	19	19	20	18	20	24	19	18	17	14
Wanted baby/was pregnant but used:										
reliable method before	12	12	10	14	12	10	15	15	9	10
less reliable method before	5	5	4	4	4	5	6	6	5	5
Not using method currently but used:										
reliable method before	*	*	1	*	1	*	*	—	*	*
less reliable method before	—	—	—	—	—	—	—	—	—	—
Never used any method	12	11	8	7	9	9	10	9	23	22
No answer	4	—	5	—	4	—	4	—	1	—
Base	2,270	1,384	603	365	626	387	621	404	420	228

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[1] Includes less than 1% of respondents to whom a value of 2·5 children was assigned.

In practice, the sample described as 'set' in table B.6 was not actually the target sample since it was not possible to exclude those women who for reasons of separation, divorce, remarriage or incorrect information were not in fact eligible for recall. However, the discrepancies were small in number and unlikely to affect the distribution of the characteristics of the sample 'set' illustrated in table B 6 to any substantial extent.

The data again suggest that the recall sample failed to obtain interviews with a disproportionate number of those childless in 1967, especially with those childless after some four years of marriage, and with those who expected to remain childless. There was also a small under-representation of those who, in 1967, thought that they suffered from some fecundity impairment. Consequently, the recall sample over-represented the views of those who expected to have two children, together with the views of those (who were likely to be the same people) who considered themselves fecund in 1967 and of those who tended to use the more reliable methods of contraception in 1967.

These conclusions are reinforced when reference is made to the available data based on official registrations of births. Tables B 7 and B 8 indicate that, at the longer marriage durations, the recall sample produced estimates of mean family size which were marginally higher than those obtained from the registration data.

Table B 7 *Mean family size 1972 by year of marriage*
Women married once only, under 45 years of age at marriage

Mean family size		
Year of marriage	*Registration data*[1]	*1972 Recall data*[2]
1960	2·25	2·3
1961	2·17	
1962	2·08	2·1
1963	2·00	
1964	1·88	1·8
1965	1·74	
1966	1·56	1·4
1967	1·36	

[1] Average number of liveborn children. Source: *Registrar General's Statistical Review of England and Wales*, 1972 Part II Table PP.
[2] Average number of liveborn and still alive children. Source: Table 2.14.

When analysed by duration of marriage (table B 8) it again becomes apparent that differences in the distribution of the numbers of living children arise from the omission in the recall sample of disproportionate numbers of married women who were childless in 1972 (as well as in 1967) and the primiparous in 1972 particularly among those married for nine years or longer.

Table B 8
Percentage distribution of living children in 1972 (analysed by duration of marriage) based on registration data[1] and the 1967 and 1972 surveys

Number of living[1] *children*	*Duration of marriage in 1972 (years)*											
	Regn data		*Survey*	*Regn data*		*Survey*	*Regn data*		*Survey*	*Regn data*		*Survey*
	5	*6*	*5–6*	*7*	*8*	*7–8*	*9*	*10*	*9–10*	*11*	*12*	*11–12*
	%	%	%	%	%	%	%	%	%	%	%	%
0	20	16	18	13	11	10	10	9	6	9	8	6
1	35	29	29	24	21	22	19	19	15	19	18	13
2	37	42	43	44	44	51	43	41	50	38	37	43
3	7	11	8	15	17	13	20	21	23	22	23	26
4 or more	1	3	1	4	6	4	8	10	6	12	14	13
No answer	—	—	—	—	—	—	—	—	1	—	—	—

[1] *Registrar General's Statistical Review of England and Wales* 1972 Part II Table QQ(c).

6. The effects of the non-response

There is no way of comprehensively assessing the effects of the non-respondents on the findings of a study research. At best, some assumptions can be made about the non-respondents based on whatever information is known about them and the effects these assumptions have on the conclusions which derive only from the respondents may serve as a guide to the degree of bias introduced into the estimates by the omission of part of the sample set.

To this end, the possible effects of the non-respondents on the estimates of the (most likely) number of children expected in 1972 have been investigated. The estimates discussed in the study (table 3.7) were based solely on the replies of the respondents. Four sets of assumptions about those who failed to reply have been made and their assumed replies incorporated into the estimates for respondents to produce revised estimates of the number of children expected in 1972. The assumptions themselves were wide-ranging and based on the knowledge that those who escaped investigation in 1972 were more likely to be the childless in 1967 or childless or a single-child mother in 1972.

The first assumption, perhaps the most unrealistic, was that all those who failed to be included in the 1972 recall expected in 1972 the number of children they actually had in 1967. This is unrealistic since, in 1967, a majority of these women had been married for less than five years and families are rarely complete within so short a time of marriage. However, such an unrealistic assumption may set one limit to the range of the bias introduced by the non-respondents. If this were the case—that those omitted from the recall expected to have only the number of children they actually had in 1967—the effect on the estimates of the most likely number of children expected in 1972 is given in column A of table B 9. Compared with data based only on the respondents, this assumption would result in a considerable increase in the proportion of women who expected to remain childless—an increase which was out of line with all other data on the present incidence and likely future of childlessness. However, if these were the characteristics of the non-respondents, the distribution of expected family size in 1972 would be, at one extreme, that illustrated in column A.

The second assumption required that the non-respondents expected in 1972 the same number of children they expected in 1967. Whereas this is uncertain in individual cases, for the group as a whole this is not a completely unrealistic assumption especially where the distribution of expected family size in 1967 for the non-respondents was not grossly dissimilar from that of respondents (table B 6). For the respondents as a whole, the mean number of children expected in 1967 was 2·3 compared with a mean of 2·2 in 1972 and the distributions by expected family size, though not the same in 1972 and 1967, were sufficiently similar to suggest that in the aggregate the distribution of expected family size in 1967 could be used as an indicator of the distribution of expected family size in 1972.

Incorporating this assumption into the respondents' data on expected family size in 1972 produced the figures in column B of table B 9. It is noticeable that its effect though small results in an increase in the proportion of women who expected to remain childless while reducing the over-emphasis on the two- and three-child family which was a consequence of a reliance on the responding sample.

The remaining assumptions which were probably more realistic than either of the foregoing also resulted in distributions of numbers of children expected in 1972 which differed only a little from that based on the responding sample (columns C and D of table B 9). The assumptions which produced the distribution in column C are described below that table. They take into account the relative over-representation among the non-respondents of the childless and the corresponding under-representation of those with (and therefore expecting) two or three children.

The final column D in table B 9 is based on the distribution of number of children expected in 1972 according to the number of living children in 1972, reweighted by official data on the distribution of liveborn children by 1972 (derived from table B 8). Within each parity category, it was assumed that the non-respondents and respondents had similar views on the number of children they expected altogether but the reweighting of the parity categories according to the available registration data for 1972 resulted in the distribution of number of children given in column D.

Table B 9

Percentage distribution of most likely number of children expected in 1972 according to varying assumptions about non-respondents

Most likely number of children expected in 1972 (1972 definition)	*Responding sample*		*Total sample assuming non-respondents*			
			A	*B*	*C*	*D*
	Number	*Percentage*	*Percentage*	*Percentage*	*Percentage*	*Percentage*
		%	%	%	%	%
0	68	5	15	7	7	6
1	136	10	14	10	11	12
2	673	48	42	45	45	46
3	362	26	22	24	26	25
4 or more	138	10	7	10	11	10
No answer	7	1	*	3	1	*
Mean number (approx)	—	2·3	2·0	2·3	2·3	2·3
Base	1,384		Sample set 1,384			

A: expected in 1972 the number of children they actually had in 1967

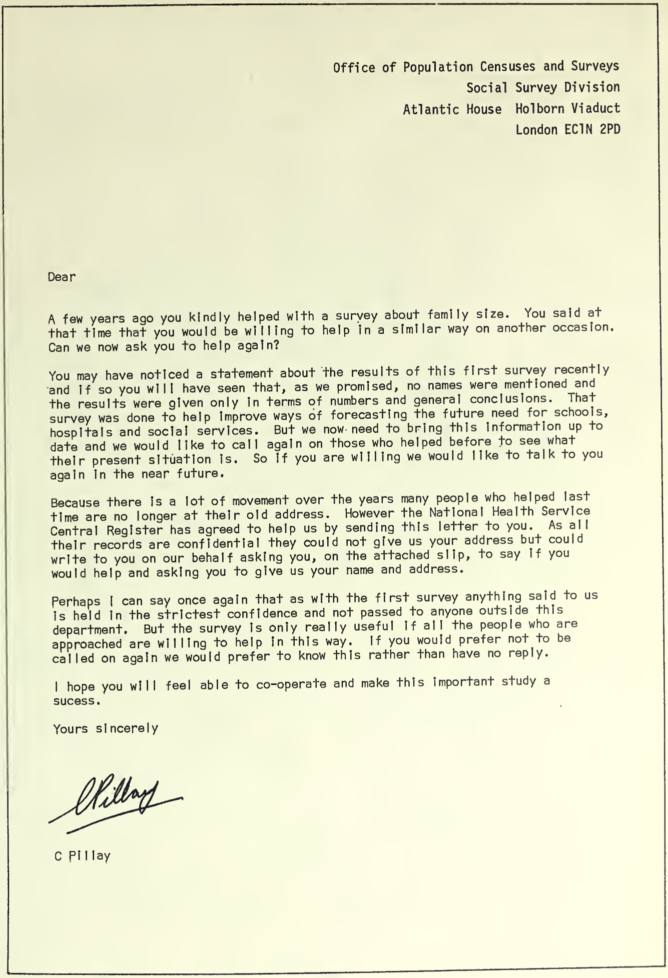
B: expected in 1972 the number of children they expected in 1967

C: expected in 1972 the following number of children:
(i) of those who expected no children in 1967, 60% expected none in 1972, the remainder distributed as respondents
(ii) of those who expected one child in 1967, 50% expected one in 1972, the remainder distributed as respondents
(iii) of those who expected two children in 1967, 50% expected two in 1972, the remainder distributed as respondents
(iv) of those who expected three children in 1967, 40% expected three in 1972, the remainder distributed as respondents
(v) those who expected four or more children or gave no answer distributed as respondents

D: expected in 1972, the stated numbers expected in 1972, reweighted according to official data on number of liveborn children in 1972 (table B 8).

It is notable that only in the case of the extreme assumption that the number of children expected by those who were omitted from the recall was the same as the number of children they actually had in 1967 was the distribution of the number of children expected in 1972 substantially affected. And even in that case, it was the proportion expecting to remain childless which was most affected. In all the other examples, despite the range of assumptions made about the non-respondents, the distribution differed little from that based on the respondents and the mean number of children expected differed not at all.

Although not conclusive of the effect of the non-response, the analysis above gives added confidence to the use of the study's findings based as they are solely on those who were accessible and willing to be included in the follow-up study. Nevertheless, in gauging the validity of the results, the disproportionate omission of the childless and the over-representation of those with two children need to be constantly borne in mind.



Office of Population Censuses and Surveys
Social Survey Division
Atlantic House Holborn Viaduct
London EC1N 2PD

Dear

A few years ago you kindly helped with a survey about family size. You said at that time that you would be willing to help in a similar way on another occasion. Can we now ask you to help again?

You may have noticed a statement about the results of this first survey recently and if so you will have seen that, as we promised, no names were mentioned and the results were given only in terms of numbers and general conclusions. That survey was done to help improve ways of forecasting the future need for schools, hospitals and social services. But we now need to bring this information up to date and we would like to call again on those who helped before to see what their present situation is. So if you are willing we would like to talk to you again in the near future.

Because there is a lot of movement over the years many people who helped last time are no longer at their old address. However the National Health Service Central Register has agreed to help us by sending this letter to you. As all their records are confidential they could not give us your address but could write to you on our behalf asking you, on the attached slip, to say if you would help and asking you to give us your name and address.

Perhaps I can say once again that as with the first survey anything said to us is held in the strictest confidence and not passed to anyone outside this department. But the survey is only really useful if all the people who are approached are willing to help in this way. If you would prefer not to be called on again we would prefer to know this rather than have no reply.

I hope you will feel able to co-operate and make this important study a sucess.

Yours sincerely

C Pillay

Please complete and return to:
Mrs C Pillay
Room G10
Office of Population Censuses and Surveys
Social Survey Division
Atlantic House
Holborn Viaduct
London EC1N 2PD

☐☐☐☐☐
☐☐☐
☐

I am the person previously interviewed by Social Survey in 1967.

i) My name is Mrs ______________________________

ii) My PRESENT ADDRESS is ______________________________

____

____

iii) Another visit

Please tick the right box

ONE OF YOUR INTERVIEWERS CAN CALL ON ME. I AM WILLING TO HELP THE SURVEY AGAIN. ☐

or

Your interviewer should not call on me again ☐

A STAMPED ADDRESSED ENVELOPE IS ATTACHED FOR THE RETURN OF THIS NOTE

Appendix C

Definitions

1. **Future fecundity 1967**

Definitely sterile:

i. those women who had experienced the menopause, had had a hysterectomy or other sterilising operation or whose husband had had a sterilising operation
ii. those women who said that their doctor had said that they had no chance of having a child or whose husband had no chance of fathering a child.

Probably sterile or related physical difficulties:

i. those women who said that coitus was difficult or painful
ii. those women who had an injury or illness that made child-bearing dangerous to health
iii. those women whose doctors advised against child-bearing or who were only fairly sure or uncertain about the informant's ability to have children
iv. those women who said that child-bearing was 'difficult' because of a danger/history of miscarriages/stillbirths/toxaemia, because of the risk of a difficult birth or because some illness/disability would be aggravated by a pregnancy.

Sub-fecund:

i. those women who had difficulty in conceiving
ii. those women whose last use of family planning was in 1965 and who had had no pregnancy by 1967
iii. those whose last use of family planning was between 1958 and 1964 and whose total pregnancies were fewer than the number to be expected from unlimited fertility.

Fecund but with past difficulties:

i. those women unaware of any current limitation to fecundity but who said they experienced such difficulties in the past
ii. those women who said that they had experienced periods of at least two years' duration in their marriage in which they had not used family planning and had not become pregnant.

Fecund:

Those women unaware of any physical difficulties in having children either in the past or at present.

2. **Future fecundity 1972**

Husband/wife has had operation or injury preventing conception:

Q.21 codes 3–6 (see Appendix A).

Difficulties relating to conception, pregnancy, childbirth, reproductive system (including the possibility of a malformed or handicapped child):

i. those claiming such difficulties in answer to Q.22
ii. those whose last use of family planning was in 1969 or earlier and who had experienced no pregnancy by 1972
i i. those whose last use of family planning was between 1961 and 1968 and whose total pregnancies were fewer than would be expected from unlimited fertility.

Physical difficulties (not of reproductive system) which would be aggravated by pregnancy:
- i. those claiming such difficulties in answer to Q.22.

Fecund but thought to have had difficulties in previous five years:
- i. Q.20 code 1.
- ii. those who in answer to Q.35a had used no method and had not become pregnant (if not included above).

Fecund:
Remainder unaware of any of above difficulties.

3. **Minimum number of children expected in total** (1967 definition)

- a. Those women who said it was 'impossible' to have any more children: the number of children still living at the time of the interview.
- b. Those women who said it was 'difficult' for them to have any more children: the number of children still living at the time of the interview.
- c. Remainder of women:
  - i. those who may have more children: the smallest number they expect to have altogether
  - ii. those who probably/definitely will not have any more children: the number still living at the time of the interview.

In all cases except c(i) one was added if the woman was currently pregnant.

4. **Minimum number of children expected in total** (1972 definition)
As 1967.

5. **Maximum number of children expected in total** (1967 definition)

- a. Those women who said it was 'impossible' to have any more children:
  - i. those who said they might have more 'if something happens so that you can have a child': the number they expected to have altogether
  - ii. those who said they would not have more: the number of children still living at the time of the interview.
- b. Those women who said it was 'difficult' for them to have any more children:
  - i. those who expected or were uncertain about having more: the largest number of children they expected to have altogether
  - ii. those who did not expect to have any more children: the number of children still living at the time of the interview.
- c. Remainder of women:
  - i. those who expected or were uncertain about having more children: the largest number of children they expected to have altogether
  - ii. those who would probably/definitely not have any more children, the largest number they might have if circumstances changed or the number of children still living at the time of the interview.

Where the appropriate number was the number of children still living, one was added if the respondent was currently pregnant.

6. **Maximum number of children expected in total** (1972 definition)

- a. Those who had had an operation or injury: number of children still living at the time of the interview.
- b. Those who had some other impairment: number expected if they were to change their minds about future children or number of children still living otherwise.

c. Remainder:
   - i. those who expected more children or were uncertain: the largest number mentioned
   - ii. those who probably/definitely expected no more children, the number they would expect if they changed their minds, otherwise the number of children still living.

Where the appropriate number was the number of children still living, one was added if the respondent was currently pregnant.

7. **Most likely number of children expected in total** (1967 definition)

a. Those women who said it was 'impossible' to have any more children: the number of children still living at the time of the interview.

b. Those women who said it was 'difficult' for them to have any more children:
   - i. those who expected more: the number they expected altogether
   - ii. remainder: the arithmetic mean of the minimum and maximum numbers in definitions 3 and 5 above.

c. Remainder:
   - i. those who expected more children and were 'very sure' about that number, the number mentioned
   - ii. remainder: the arithmetic means of the minimum and maximum numbers in definitions 3 and 5 above.

Where appropriate, one was added if the respondent was currently pregnant.

8. **Most likely number of children expected in total** (1972 definition)

a. Those who would find it difficult or impossible to have any more children: the number of children still living at the time of the interview.

b. Remainder:
   - i. those who expected more children or were uncertain, the arithmetic mean of the largest and smallest number where the respondent was fairly sure/not too sure of the number expected. Otherwise the actual number mentioned (including those who were 'very sure' of the number expected)
   - ii. those who probably/definitely expected no more children: the number still living at the time of the interview.

Where appropriate, one was added for women currently pregnant.

9. **Use of family planning 1972**

Has had operation/injury affecting conception	Q.21 codes 3–6
Never used contraception	Q.32 code 99
Uses reliable methods at the moment	Q.33 codes 5, 6, 7, 10
Uses less reliable methods at the moment	Q.33 codes 1–3, 4, 8, 9, 11
Wants baby/is pregnant/ just had baby and used reliable methods before	Q.34 codes 5, 6, 7, 10 for Q.14 codes 5, 7; Q.33a code 1 and Q.33a code 2
and used less reliable methods before	Q.34 codes 1–3, 4, 8, 9, 11 for Q.14 codes 5, 7; Q.33a code 1 and Q.33a code 2
Not using for other reasons and used reliable methods before	Q.34 codes 5, 6, 7, 10 and Q.33a code 3
and used less reliable methods before	Q.34 codes 1–3, 4, 8, 9, 11 for Q.33a code 3

10. **Future use of planning 1972**

Uses/last used 'reliable' methods and	Appropriate categories in definition 9 above
will continue with one or more of these methods	*and* Q.36a codes 5, 6, 7, 10
will use sterilisation	*and* Q.36a code 12
will not continue with reliable methods	remainder
Uses/last used 'less reliable' methods and	Appropriate categories in definition 9 above
will use 'reliable' methods	*and* Q.36a codes 5, 6, 7, 10
will use sterilisation	*and* Q.36a code 12
will continue with 'less reliable' methods or none at all	remainder
Never used contraception and	Appropriate categories in definition 9 above
intends to use 'reliable' methods	*and* Q.36a codes 5, 6, 7, 10
intends to use sterilisation	*and* Q.36a code 12
D.K. methods will use or does not intend to use methods	remainder

11. **Planning circumstances of births of living children occurring 1967–72**

Births of living children since last interview:

All planned	Q.16a *all* items coded 1
All unplanned	Q.16a *all* items coded 2, 4 or 5
All occurring before use of family planning	Q.16a *all* items coded 3
Planned or occurred before use	Q.16a Items coded 1 or 3
Unplanned or occurred before use	Q.16a Items coded 2, 3, 4, 5
Occurred under all circumstances	Q.16a Items coded 1, 2, 3, 4 or 5

12. **Family organisation**

Considering the answers to Qs. 23c, 22f, 23a, 22e, 22b and 23e in the 1967 questionnaire[1], these were categorised into five groups:

Those coded 3 (both-joint):
- on all six items
- on any five items
- on any four items
- on any three items
- on any two or one item and those without any code 3.

13. **Attitude measures 1972**

The main items comprising the five attitudes are given below:

Factor 1 Antipathy for children
Children tie you down too much
Children get on your nerves
Women only have babies because they feel they ought to have babies
Children are selfish; it's all give and no take having children
Women find motherhood satisfying (negative).

---

[1] Copies of the questionnaire are available from the Social Survey Division of the OPCS.

Factor 2 Fear of overcrowding and over-population

People will have to stop having large families because we are over-populated
When children grow up there will be so many people it will be difficult to get jobs
These days schools are overcrowded because too many children are being born.

Factor 3 Importance of material conditions

It is important for children to have:
  a separate bedroom for each child when they are teenagers
  a nice home for inviting friends round
  toys like those of children he plays with
  new clothes intended for him rather than ones handed down
  a lot of individual attention from parents.

Factor 4 Partiality to children

Having children is just a natural instinct in women
Cuddling babies makes all the trouble they are worth while
You always find the happiest families are those with a large number of children
As you get older it's nice to have children of your own about the house
Women find motherhood satisfying.

Factor 5 Need for siblings and training to share

You always find the happiest families are those with a large number of children
It is important for children to have:
  several brothers and sisters
  at least one brother or sister
  training in sharing with others.

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